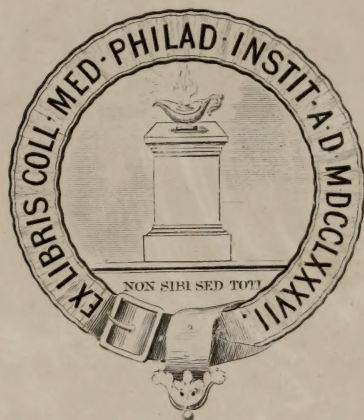




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Presented by
R. J. Douglass, M.D.

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—THE—

Cleveland Medical Gazette.

VOL. III.

NOVEMBER, 1887.

No. 1.

ORIGINAL ARTICLES.

A REVIEW OF GOLZ ON THE FUNCTIONS OF THE CEREBRUM.

BY C. SIHLER, M. D., PH. D., CLEVELAND, O.

Inasmuch as brain-charts showing the different areas for the different functions are now invading the works on Practice, perhaps some of the readers of the GAZETTE may be seriously thinking of studying and memorizing some of these charts on brain geography as they used to do the map of the United States in their younger days. Before undertaking this, however, I should advise them to become acquainted with the investigations of Professor Friedrich Golz of Strassburg, who has laid down the results of his work in four essays, entitled: Functions of the Cerebrum—*Verrichtungen des Gross hirns*. E. Strauss, Bonn.

These essays have three attractive features. First, they treat of a subject in Physiology of interest to every physician and not surrounded by technical difficulties as *e. g.*, the electrical phenomena of muscle. Secondly, they are the result of careful investigation extending over a series of years; the first essay was published in 1876, the last in 1881. Thirdly, they

are written in the most charming style. Any one wishing to secure some physiological writing in the German language will be fortunate to have made the acquaintance of these essays. It is to be hoped that they will soon be translated into English, if for no other reason than to hear the *altera pars* in the question of localization.

Our space will allow us to dwell only on the fourth essay, in which Golz discusses particularly the doctrine of the localization of functions as upheld by Ferrier, Hitzig, Munk and others. The essay is accompanied by six finely executed colored, life-size figures, showing the brains in their natural appearance, from which the fine outline drawings accompanying this article are taken. Figures 1 and 2 are of the same size as the original, the remainder reduced to two-thirds of the size of the original drawings.

Before giving details, however, attention must be called to the method used and to one very important point in the reasoning of Golz. While Golz formerly employed a stream of water applied to the brain substance by the aid of a peculiarly constructed canula, washing away the brain-substance, in his later experiments, White's dental drill was made use of, provided, of course, with such end apparatus as allowed to remove portions of brain-substance of definite extent as well as definite depth.

The important point in the reasoning of Golz is this: He says it is very important to make a distinction between the transient and the permanent phenomena. Thus shortly after an animal has a certain amount of grey matter removed it will show a certain series of disturbances; in the course of some days or weeks some of these will have disappeared; others, however, will remain as long as the animal lives, and only these latter symptoms are to be attributable to the defect in the brain substance. To illustrate: dogs upon which several operations have been performed will, after the last operation, often present an entire absence of desire for food, so that in one case such an animal had to be fed artificially for fourteen days. Gradually these animals regain their desire for nourishment, and will, in various ways, show that that

fundamental impulse, hunger, was not extinguished in them. Now one would make a serious mistake if the condition in those animals soon after the operation were allowed to be admitted as sufficient for the establishment of a centre of hunger as Ferrier has done.

For an explanation of these matters Golz calls attention to what can be observed, when the spinal cord of the dog is divided in the dorsal region. For some time after the operation it looks as if there was not a single centre for reflex action in the cord, the hind limbs hanging down as lifeless as though all the nerves coming from and going to the cord were cut, if the animal is so held that the limbs hang down free, and remaining perfectly quiet if mechanically irritated. But in eight weeks, if the animal's hind limbs will be allowed to hang down, they will not be at rest a minute, both legs being pulled up alternately with the regularity of clock-work, and pressure upon the paw will be answered by a powerful jerk. In short, the cord of the dog shows now a greater abundance of reflex activities than even the cord of the frog. As this reappearance of functions in the cord is not due to a healing together of the cut ends, this explanation seems the most reasonable. The disturbance due to the operation and the healing process exerts an inhibitory action [a sort of shock] on the centres of the cord. As soon as this influence vanishes, the centres resume their old activities. The disappearance then of the reflex movements would be an example of the transient phenomena, while the want of conductive power between the brain and the posterior extremities would be a sample of the permanent disturbances due to the cut. But if a simple cut has such a marked influence on the cord, any operation on the grey matter of the brain may be expected to have some analogous influence on other portions of the cerebrum, cerebellum and the basal ganglia, and perhaps even the cord.

Any one not distinguishing between these two kinds of effects would be liable to arrive at false conclusions. Golz thinks that others working in this field have not paid much attention to this point. It was his aim to keep his animals

alive after the operation so that a stationary condition would be arrived at, due not to disturbances of the operation, but due to the defect in brain substance.

In attacking the problem of the localization of functions in the grey matter of the cerebrum, Golz reasons thus: Before trying to get at the function of some small area, would it not be more advisable to make comparisons between (1) dogs which have the whole grey matter removed on both sides—as far as accessible—(2) dogs which have the posterior quadrants; (3) dogs which have the anterior quadrants of their cerebral hemispheres denuded; (4) dogs in which but one side has been operated on, and (5) dogs in which an anterior quadrant of one side and a posterior of the other side have been destroyed? If there are many small areas then in an operation in which *e. g.* two whole anterior quadrants were destroyed, a great number of centres would be thrown out, and we might expect a very marked difference between this dog and one in which the entire posterior quadrants had been subjected to the experiment, and either of these would differ materially from an animal in which all the four quadrants had been operated upon.

Let us now see what the experiments teach on this question.

Fig. 1. shows the surface of a brain operated on four times (always, of course, under chloroform) on the following dates: July 2, 1879, anteriorly on left side; October 7, 1879, posteriorly on right side; December 2, 1879, posteriorly on left side; February 10, 1880, anteriorly on right side.

One year and ten days after the last operation the dog then in good health was killed. It weighed 12.5 kg. and measured from root of tail to mouth 75 cm. The remarkable fact however is that the brain of this dog, hardened in Miller's fluid, weighed but 13 grms., while the normal brain of a dog of 76 cm. length weighed as much as 93 grms. We see then what an enormous shrinkage the brain sustained from the operation, and it will be interesting to note the condition of the dog after the last operation.

After the first operation the animal showed diminished sen-

sibility of the skin of the entire right side and diminished vision on the same side; these symptoms disappeared almost entirely in three months. Similarly after each operation the greater part of the disturbance due to the same disappeared to a large extent. After the last operation the dog was unable to eat and had to be fed, but after some weeks it was able to devour a big meal without any assistance. After entirely recovering from the last operation the dog was fully

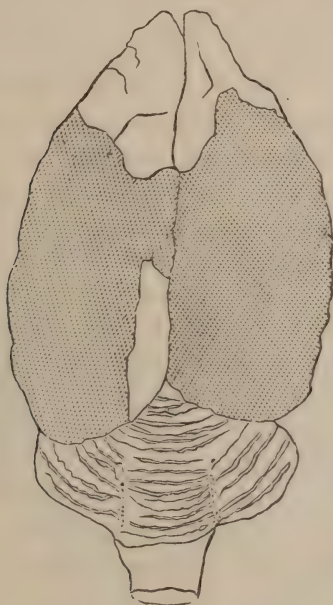


FIG. 1.

able to walk about, generally keeping its nose near the ground, snuffing. On slippery ground it showed a tendency to lose its footing. It seemed almost blind, so that it would have walked into a big gas flame if not prevented. But as a matter of fact it was not blind, as can be seen from the following: It was the dog's custom to walk about in its cage when hungry, when he never bumped his head, but made the proper turns in each corner. Upon noiselessly opening the door of the cage and admitting the full daylight, the animal when

reaching the door did not make the usual turn but went for the opened door to walk out, nor had it any trouble to find the opening if by a board the same was partly closed either from the right or left side. When its eyes were closed with sticking plaster it grew very angry, and tried to remove the same with its fore-paws; being too awkward to accomplish this, the dog lay down quietly in the corner of its cage. On the following day it commenced to wander about in the cage but now continually was knocking its head against the walls of the cage, so that the noise could be heard at a distance; nor did it place its fore-paws on the rim of the cage as it was accustomed to do. The dog was not deaf, inasmuch as it could be roused from its sleep by the aid of the voice; but neither angry nor flattering words, nor the barking of other dogs had any effect on it. As a rule the animal would distinguish between things eatable and not eatable, but was not fastidious, and would crush a piece of wood as well as a piece of bone. Cigar smoke and chloroform vapor (both very obnoxious to normal dogs) it did not object to. The sensibility of its skin was quite obtuse, but no part of the body was devoid of sensibility. Decided pressure upon a paw would not only induce the dog to withdraw the limb, but would also set the dog into a fit of fury.

The animal showed no interest in any other dog, nor in man; no sign of sexual instinct was present. While after the first two operations it was inclined to play, it could not now be induced to do this.

The inability to utilize the impressions derived from the senses could best be seen in the way the dog took its food. It had no trouble to take its meals from a vessel in the corner of its cage; but when walking about in the room it would, even when hungry, stumble over the same, not knowing what to do with the same; and even if its nose was pushed into the same, it was only able to grasp a mouthful or two, and would soon be biting the rim of the vessel and lose it altogether; nor was it able to again find it. Bones the dog was fond of eating, but was unable to grasp them properly with its forefeet.

Golz points out that the observations on this dog tally badly with either Ferrier's or Munk's brain-geography. It will be observed that the frontal lobes are preserved. According to Ferrier, Golz says, these are the centres for the intelligence. But a greater idiocy than this dog presented can scarcely be imagined. Munk (according to G.) locates the sensory centres for the rump in the intellectual area of Ferrier; and according to his brain-chart the animal should have shown loss of motion and sensation in hand, foot and tongue. But its sensations in the rump were not better than anywhere else, and it was not only able to walk but also able to make an effort in removing the sticking plaster from its eyes.

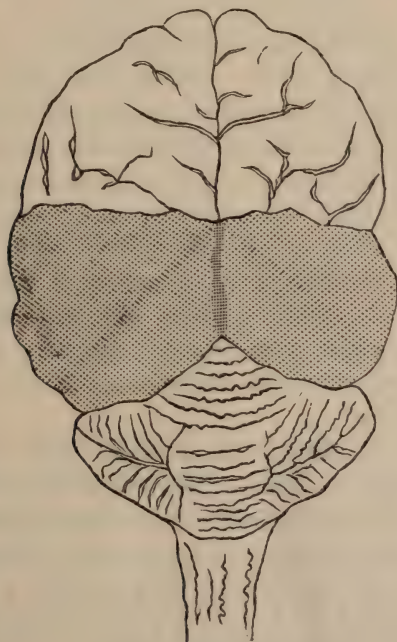


FIG. 2.

Fig. 2 shows the brain of a dog operated upon June 2, 1880, posteriorly on left side, and October 27, 1880, on right side also posteriorly. February 14, 1881, the animal, then in good health, was killed. Both posterior lobes are greatly

shrunk, and the cortex has been removed to such an extent that the entire visual area of Munk (acc. to G.) has been removed.

This dog was in a condition of moderate idiocy. Let loose in a room it would run about in good spirits, paying attention to nobody in particular, with the tendency to raise itself on its hind legs. All its actions presented a lack of concentration and attention. If a second dog was brought in the animal smelled of it for a moment, but soon ran off. Sexual instinct was not wholly absent. When called it would run up at times to the person calling, but would be just as apt to run up to some other party. This dog would not allow other dogs to partake of its meals, but would growl angrily at the intruder. It was able to take its food and drink with the same dexterity as other dogs, and had no trouble in handling bones with its fore-paws. Of a great deal of importance is the fact that the animal was able to see quite well out both eyes; it did not only avoid obstacles in running, but jumped over a stick held in its way. The vessel containing its food if placed in its cage it found at once, but pieces of meat thrown on the floor it found but slowly. Menaces with the fist or whip produced no fear, nor did cracking with the whip or loud calling. After the first operation, dog's flesh was refused; after the second, it was partaken of, nor were tobacco smoke and chloroform vapor obnoxious to him.

Fig. 3 shows a brain, both anterior lobes of which were operated on July 30, 1880. November 17 a transverse cut was made with the drill on left side, severing almost all the denuded anterior portion from the posterior part. February 7, 1881, the same operation was made on the right side. But the animal died the following night, having been walking about in its cage almost the whole time.

It will be seen that almost all of the "motor area" is denuded of its grey cortex; yet it must be pointed out, that in walking and running this dog showed no asymmetry in the use of its limbs. All its motions were of a brusque and hurried character. It was difficult to keep the animal quiet

long enough to dress its wounds. While the dog was able to raise himself on his hind feet and to jump, these movements were performed in a clumsy manner. On gnawing a bone, it had difficulties in holding the same with its fore-paws. Skin sensation probably was obtuse, but firm pressure the dog resented by angrily pulling away the offended member. Immediately after the first operation, the sight in both eyes was very poor, but soon improved, so that two months after-

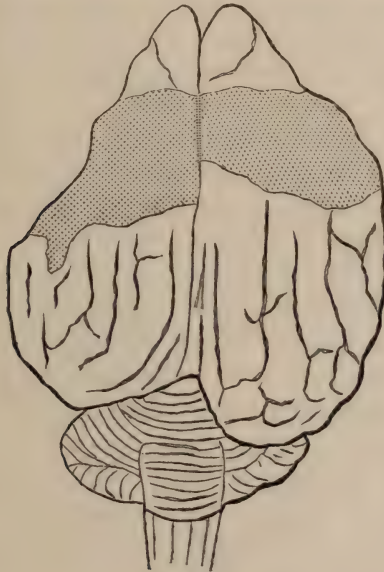


FIG. 3.

wards it was impossible to say that in this respect the animal differed from a normal dog. Pieces of meat thrown about the room, the dog was able to find, and did show fright when menaced with a whip. It did not allow other dogs to partake of bones given to it, and showed sexual instinct. That its intellect was diminished was shown by an incident. Instead of making a motion backward to free itself, it worked itself forward, and deeper and tighter, until released by the attendants attracted by the howling.

Golz says, that if there be any truth in the localization of functions, we might expect a marked difference between a

dog with two symmetrical defects of brain-substance anteriorly and a similar defect posteriorly, and a comparison of the two dogs just described must be of special interest. I quote the following passage:

"A judge of dogs who should have observed these two animals side by side, would have given his opinion that the dog with the brain-defect posteriorly, in his whole demeanor, seemed the more stupid of the two, but that the other dog also seemed to be possessed of but little intelligence. The observer further could not have failed to notice that the movements of the dog operated on anteriorly were more clumsy, and that the dog was more restless. No one not initiated would have expected, to judge from the behavior of the dogs, that they had experienced any injury to their brains. The difference seemed to be of the same degree as one is apt to find between dogs of different race and different natural talent. Only if the attention was drawn to the fact that the dog that seemed the more stupid was not alarmed by menaces, did not object to tobacco-smoke and did not hesitate to partake of dog's flesh, then one could gain the proper conception of the intellectually lower animal. The result then of the comparison of the two animals would be about this: a dog having lost the cortex of the posterior quadrants of his cerebral hemispheres, is a more idiotic animal than a dog operated on anteriorly. Sight, hearing, smell and taste are more obtuse in his case. A dog having lost the cortex of the anterior quadrants, does not show the same degree of obtuseness of the higher senses; on the other hand, the sensation of the skin is blunter. The latter condition seems to explain the fact that its motions are more clumsy than those of the animal with intact anterior lobes."

Fig. 4 shows the brain of a dog operated on the left side only, anteriorly, May 25, 1880, and posteriorly October 28, 1880, and killed in good health March 7, 1881.

This dog could scarcely be distinguished from a normal dog in spite of the enormous defect in brain-substance; was well trained and obedient towards man, while domineering against its fellow dogs, and exhibits a greater degree of in-

telligence than many a dog with its brain intact ; nor could anything abnormal be observed in the way the extremities were made use of in walking and running. When busy with a bone, he seemed not to be quite able to perfectly hold the same with the right paw. The dog evidently did not see as plainly with the right eye as with the left. From observations communicated in the first essay, Golz expected that

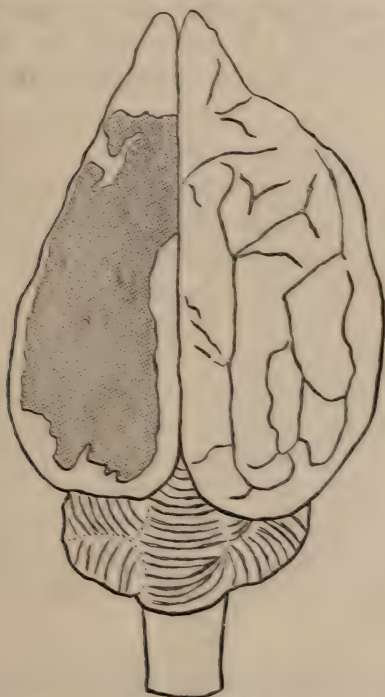


FIG. 4.

artificial closure of the left (the perfect) eye, would reveal very marked defects of vision. This, however, was not the case. The animal not only avoided all obstacles in walking, but at once approached the person calling it, quickly picked up pieces of meat thrown down for him, and was frightened by menacing gestures. Thus an animal with extensive destruction of one hemisphere, may present but moderate disturbances of function.

At first thought, one might be inclined to think that an

animal operated on crosswise, that is, anteriorly on one side, and posteriorly on the other side, would show the same condition as the animal just now described. But this is not the case. Evidently the interference of function extends beyond the confines of the operation.

The dog, the brain of which is shown in fig. 5, was operated July 2, 1879, anteriorly on left side, and October 7, 1879, posteriorly on right side. Between October 7 and December 2, when a third operation was performed, the dog presented the phenomena of an animal operated crosswise. Immedi-

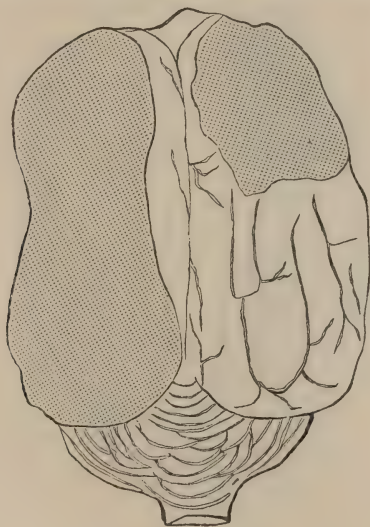


FIG. 5.

ately after the second operation there was present a very marked disturbance of vision of *both* eyes; gradually the dog learned to utilize its vision to such a degree that it was able to catch pieces of meat tolerably well, but showed no fear when menaced with the fist. The right fore-paw presented more obtuse sensation than the left. In gnawing bones it utilized principally the left. Towards the end of November the animal impressed one as decidedly stupid.

After the third operation the moderate degree of idiocy increased. In spite of destruction of the anterior quadrants, the animal was able to walk firmly and lost its footing only

on slippery ground. After closure of the left eye the dog moved about more carefully but avoided larger obstacles with certainty; other dogs it did not allow to partake of its meals.

The conclusions which Golz reaches he sums up thus :

(1). The assumption of circumscribed centres in the grey substance of the brain serving definite functions cannot be sustained.

(2). There does not exist then a definite patch of the cortex dedicated exclusively to vision, none exclusively to hearing, smelling, taste or general sensation.

(3). It is impossible permanently to paralyze any muscle and to remove the same from the influence of the will through any defined destruction of the brain surface.

(4). The physiological phenomena, which lead us to infer intelligence, feeling, passion and natural impulses, do not depend on functionally distinct areas of cortex.

(5). Destruction of the anterior portion of the cerebral surface produced disturbances due to loss of brain-substance which in some points differ from those observed after loss of the posterior portions. These differences may perhaps be explained by the injury done to the conductive tracts passing into the peduncle of the brain.

In conclusion I would say that I have not been able in the short space at my command to do justice to Golz. My aim has been to bring his work to the notice of the readers of the GAZETTE.

Those who have invested in Pepper's system may have seen Vol. V. page 90, some of those brain charts, with circles for vision, smell, taste and different movements, and also some interrogation points. Would it not be well to cover the whole brain surface with such interrogation points at present?

A REPORT ON PROGRESS IN LARYNGOLOGY.*

BY A. R. BAKER, M. D., CLEVELAND, O.

A FEW years since, while visiting the Museum of Naples, where nearly all the relics reclaimed from the long buried Pompeii are preserved, I discovered, much to my surprise, an instrument which had every appearance of being a laryngoscopic mirror. Yet this should not have caused this sensation, as there I found almost all the instruments in use to-day by surgeons. There were straight and curved bistouries, sharp and probe pointed, incased in beautiful shell handles, a blade in each end, and closing just as they do now. There were tongue depressors, probes and grooved directors, with the same flattened surface on one end for dividing the frænum of the tongue. There were tooth and bone forceps and specula of various designs, and there I saw a catheter with the double curve like an old fashioned letter s, which recently appeared as a new French instrument, but I have not time to go through the entire list. Considering the great learning of the ancient Egyptians, from whom the Greeks and Romans derived their medical knowledge, it is more than probable that they had a knowledge of laryngoscopy. We at least know that the ancient Egyptians were skillful makers of mirrors, and that they had their specialists in diseases of the eye, of the ear, of the nose, of the throat, as well as of almost every organ of the body, and that they attained great skill in the treatment of the diseases pertaining to their specialties. The recent action of the American Medical Association in deciding that a specialist must limit his practice, has no less authority than that of the ancient Egyptians,* who limited their specialists to the treatment of diseases pertaining to their special departments.

The first authentic record we have of a laryngoscopic mirror having been used was about the middle of the eighteenth century, when Leveret, an eminent French accoucheur, devised numerous instruments for the illumination of the throat, nose and other cavities, in order to snare of polypi and other

* Read before the Cuyahoga County Medical society.

growths. In 1804 Bozzini of Frankford-on-the-Main, devised a tubular speculum which reflected the light downward, and he was thus enabled to see the image of the larynx on its inner surface. He published several articles containing the result of his investigations, but they did not receive much attention from the profession. It was reserved for the London music teacher, Garcia, to devise the laryngoscope in its present form. He invented it solely for the purpose of demonstrating upon himself and his students the movements of the vocal cords during singing and speaking. In 1855 Garcia published a paper giving the result of his investigations with the laryngoscope. The paper was received in England either with ridicule or ignored entirely; but Professor Tüerck of Vienna instituted a series of experiments to demonstrate its value in medicine. He, however, failed to accomplish much with it, owing to his imperfect instruments and not using reflected light, and gave it up temporarily. Professor Czermak of Pesth, who was studying at this time the mechanisms of the utterances of the Arabic gutturals, borrowed Professor Tüerck's mirrors. He improved them and recognized their value as an aid in diagnosing diseases. He continued his investigations and was the first to use the reflecting mirror, thus securing better illumination.

Professor Tüerck again took up the subject, and to him we are principally indebted for teaching the use of the laryngoscope to his professional brethren throughout Europe. He recognized the feasibility of reversing the instrument and thus inspecting the post nasal cavity.

Drs. Semeleder and Carl Stoerck of Vienna, Dr. Lewin of Berlin and the late lamented Dr. Elsberg of New York comprised Dr. Czermak's first class in laryngoscopy, all of whom became enthusiastic advocates and teachers of laryngoscopy and did much to establish this special branch of medicine on the continent, Great Britain and in the United States.

There are few branches of medicine which have made such rapid strides as that of laryngology during the past quarter of a century. Probably no specialty has met with such bitter opposition, and certainly no branch of the profession can pre-

sent a brighter galaxy of enthusiastic workers, who by assiduous, constant work in one channel have compelled recognition and made it one of the most important departments of medicine. This has been brought about more especially by men who have devoted their energies to one branch of study than any other, unless it be that of dentistry. We may mention among the host of workers in this field in America, Drs. Horace Green, Louis Elsberg and Silas Cohen; in Great Britain, Drs. Morell Mackenzie and Lennox Browne; in Germany, Tüerck, Schröetter and Lewin; in France, Fauvel and others—all specialists in the best sense of the word.

It may be interesting as well as profitable to compare the present treatment of diseases of the larynx with that of pre-laryngoscopic days.

As the case of General Washington is deeply interesting to every American, and as it is acknowledged to be the "first accurately reported history of this form of inflammation (oedema of the larynx) which is to be found in the annals of medicine," I will read a history of the case as detailed by the intelligent physicians, Drs. James Craik and Elisha E. Dick, who attended him during his last illness.

"On the night of Friday, the tenth of December, 1799, having been exposed to rain on the preceding day, General Washington was attacked with an inflammatory affection of the upper part of the wind-pipe, called in technical language, cyanche trachialis. The disease commenced with a violent ague, accompanied with some pain in the upper and fore part of the throat, a sense of stricture in the same part, a cough and a difficult rather than a painful deglutition, which were soon succeeded by a quick and laborious respiration.

The necessity of blood-letting suggested itself to the general; he procured a bleeder in the neighborhood, who took from his arm, in the weight, twelve or fourteen ounces of blood. He could not by any means be prevailed upon by the family to send for the attending physician till the following morning, who arrived at Mount Vernon at about eleven o'clock on Saturday. Discovering the case to be highly alarming and foreseeing the fatal tendency of the disease, two

consulting physicians were immediately sent for, who arrived one at half-past three and the other at four o'clock in the afternoon. In the meantime were employed two pretty copious bleedings, a blister was applied to the part affected, two moderate doses of calomel were given, and an injection was administered, which operated on the lower intestines, but all without any perceptible advantage, the respiration becoming more difficult and distressing. Upon the arrival of the first of the consulting physicians, it was agreed as there were yet no signs of accumulation in the bronchial vessels and lungs, to try the result of another bleeding, when about thirty-two ounces of blood were drawn without the smallest apparent alleviation of the disease. Vapor of vinegar and of water were frequently inhaled, ten grains of calomel were given, succeeded by repeated doses of emetic tartar, amounting in all to five or six grains, with no other effect than a copious discharge from the bowels. The powers of life seemed now manifestly yielding to the force of the disorder. Blisters were applied to the extremities, together with a calaplast of bran and vinegar to the throat. Speaking, which was painful from the beginning, now became almost impracticable; respiration grew more and more contracted and imperfect till half after eleven on Saturday night, when, retaining the full possession of his intellect, he expired without a struggle."

I have detailed this first recorded case of oedema of larynx not as a mere matter of historical interest, but to show that with our modern methods of examination with the laryngoscope it would have been considered one of the most simple operations to scarify the oedematous tissues and evacuate the serum, and thus the life of the father of his country might have been preserved.

I remember a few years since of being called upon one night to see a man whom I found suffering from this trouble. I had no laryngoscope or instrument with me of any kind, excepting an ordinary pocket case. I dispatched a messenger after the necessary instruments at once, but saw that before he would have time to return my patient would be dead, unless he received immediate relief. I took my curved bis-

toury, wrapped it with twine to within a quarter inch of point, and from my general knowledge of the anatomy of the parts went down and scarified the parts in the dark. There was considerable hemorrhage and my patient had literally to spit blood for his life for a few moments, but his breathing was relieved and he rapidly recovered. I very much fear that many of the cases which figure in our health reports as sudden death from heart disease are really cases of oedema of the larynx, especially those cases which are reported as found dead in bed in the morning; people don't usually die that way from heart disease.

Let us contrast the intra-laryngeal treatment as late as 1850-1857 with that of to-day. It was maintained by the most intelligent members of the profession that it was altogether impossible to enter the laryngeal cavity with medicinal substances. "The well-known fact of the great irritation produced upon an individual by the accidental introduction of a morsel of food or a drop of tea or of any other fluid below the epiglottis, was always adduced as an unanswerable argument against the practicability of introducing strong medicines into the laryngeal cavity." This only illustrates, as Dr. Horace Green well said, that medical *opinions* are worth nothing when contradicted by *medical facts*. Opinions are very good at times, but they have been the great stumbling block in the progress of medical science throughout the entire history of medicine. It is a fact that we do introduce strong medicines into the larynx every day with the very best results, notwithstanding the *opinion* of the best men in the profession that it could not be done.

Or let us compare the treatment of intra-laryngeal tumors of to-day with that of 1857. The surgeon suspecting the existence of an intra-laryngeal tumor—and it was always a mere suspicion—performed thyrotomy, cut open the larynx, and thus by an exploratory incision was able to make a window so that he could see what the trouble was, and if by accident he found a tumor he removed it. This was very seldom done however, and the tumor was generally permitted to go along unmolested. Probably eight on ten cases would include the

entire number of tumors removed prior to the introduction of the laryngoscope, while there have been thousands of tumors of the larynx successfully removed since that time. "The removal of growths by the endo-laryngeal method," to use Morrell Mackenzie's words, "represents perhaps the greatest triumph which the laryngoscope has effected. No danger is incurred, little or no pain is felt, and scarcely a drop of blood is lost, whilst the long lost function of a most delicate organ may be almost instantly restored, and a morbid condition threatening the immediate extinction of life may be at once and forever removed."

As an illustration of the skepticism with which the possibility of introducing instruments and medicines into and through the larynx was received, we may cite the remarkable controversy which took place in the New York Academy of Medicine. Dr. Horace Green read a paper before this society December, 1854, on "injections into the bronchial tubes and into the tubercular cavities of the lungs," which proved to be the rock upon which the society split, and the wide breach in the New York profession remained until a few years since when Dr. Fordyce Barker was elected president of the academy of medicine.

[Since reading this report before the Cuyahoga County Medical Society I have secured a copy of the majority and minority reports of the committee through the kindness of Dr. Vance of this city and Dr. Dandridge of Cincinnati, taken from an original copy of the transactions of the New York Academy of Medicine. Vol. I., 1887. This copy is preserved in the library of the Cincinnati hospital. It is said these transactions were bought up and destroyed as far as possible. If space permitted I would be pleased to reprint these reports entire, which would prove very interesting reading, but as they are very long I must be content with publishing a brief abstract from the minority report and the conclusions of the majority report. In addition to those reports there were supplementary reports by Drs. James Anderson and Alexander Stevens, the other members of the committee. Dr. Stevens concurred in the main with the minority report.

The following is taken from the minority report :

At a meeting of the New York Academy of Medicine, December 6, 1854, the following resolution, furnished to me by the recording secretary, was passed, viz. ; " Resolved, that a committee of seven be appointed by the chair to enquire into and investigate the treatment proposed by Dr. Green, in his paper read this evening."

In the paper referred to the committee, Dr. Green first alludes to the skepticism of Professor Erichsen of London, and Professor Trousseau of Paris, as to the possibility of " passing the sponge-probang through the larynx into the trachea, even of the cadaver, much less into that of the living subject."

Dr. Green claims " that this method of medicating the larynx and trachea, is accomplished with much ease and ordinarily with great certainty ; and that, by this means, disease of those organs, which would otherwise have proved mortal, have been repeatedly arrested." He goes still further in asserting that the sponge-probang " has been passed at will into the right or left bronchial division." To prove that it could be passed through the vocal cords, Dr. Green attached a sponge, of the same size with those which are used with the ordinary throat probang, to one of Hutching's flexible tubes, and wetting the sponge with a strong solution of nitrate of silver, he passed it down to the vocal cords, through the rima-glottidis (as he supposed) several inches into the trachea. The patient breathed through the tube for several moments, and extinguished a lighted lamp, by blowing through the tube. In order more rigidly to test this experiment in another patient, a large, pasteboard card, perforated in the centre, and of sufficient size to screen the nose and mouth completely, was then slipped over the tube, to which it fitted closely, and the patient directed to blow out the light, which was accomplished through the tube as promptly as in the first instance. In another patient, a small air-tight elastic bag was tied over the upper extremity of the tube, and on introducing the instrument six or eight inches into the trachea, this little bag was inflated and collapsed several times, by the act of inspiration and expiration on the part of the patient. In another case, a small ball of floss was suspended by a thread before the mouth of a tube, and this was alternately drawn into and expelled from the opening by the act of respiration.

Dr. Green believed that these experiments conclusively proved " that the operation of passing the sponge-probang into the larynx and trachea is positively being accomplished." From these results he was led to inquire, " What shall now hinder the introduction of medicinal agents through the lungs, or directly into the bronchi and their terminations? What will prevent the injecting even of a vomica under favorable circumstances, with appropriate remedies?" Dr. Green at once endeavored to put in practice the inferential suggestions resulting from the experiments above alluded to. In the paper referred to the committee, he professes to have " treated for a longer or shorter period thirty-two patients laboring under tubercular or bronchial diseases, by the direct introduction into the lungs of a strong solution of nitrate of silver, injected through the elastic tube."

In conclusion, the minority of the committee would suggest for the acceptance of the Academy, the following propositions :

First. Direct medication of the lungs by means of catheterism of the air tubes, was first proposed and carried into effect by our associate member, Dr. Horace Green.

Second. The operation may be performed by the dexterous surgeon with ease and facility, and with perfect safety to the patient.

Third. The results of this method of treatment, whether it has been employed in bronchial affections or in the commencement of tuberculosis, have already afforded the most gratifying indications that practical medicine will be greatly advanced by this discovery.

The following conclusions are taken from the majority report :

First. Catheterism of the air-passages dates its history from the time of Hippocrates.

Second. The best evidences of the passage of an instrument into the air-passages are the rational signs.

Third. The facility of the operation depends upon the kind of instrument used, the tube having a large curve being the best, and the sponge-probang least adopted to enter the trachea.

Fourth. That there is no reliable evidence, in the opinion of your committee, that the sponge-probang has been passed through and beyond the vocal cords.

Fifth. That there is no positive evidence that an instrument can be passed at will into the right or left bronchial divisions.

Sixth. That, in the great majority of instances, where injections are supposed to have been thrown into the lungs through a tube, they have passed directly into the stomach.

Seventh. That, as regards the utility of injections of nitrate of silver into the lungs the fact thus far developed in the experiments of your committee lead them to regard the operation as one attended with danger as well as difficulty.

WILLARD PARKER, M. D., chairman.	} Committee.
JOHN I. STONE, M. D.	
ISAAC WOOD, M. D.	
JOHN T. METCALFE, M. D.	

When the Academy of Medicine adopted this report, a large number of the members who had witnessed Dr. Green frequently catheterize the larynx left in a body.]

This controversy illustrates a peculiar phase of the medical profession. They are always ready to accept with open arms a new drug. It is only necessary for some obscure member of the profession to announce that he has discovered a new remedy for some disease, and every physician throughout the world tries it immediately. But let a new operation be proposed, and it will be received with the greatest skepticism. See how long abdominal surgery was in gaining a secure standing.

Dr. Robert Battey, now the pride of southern medicine, says, with regard to the danger of being a pioneer in oöphor-ectomy, in describing the history of his first case: "While engaged in nursing assiduously, as I did, my first patient, spending ten days at her bedside without leaving the house for a moment, even for a change of linen—during this time of great suspense and anxiety, in the office of one of my brother practitioners were held nightly meetings of the profession of the town, receiving reports on the condition of my

patient, awaiting her demise with anxious longings, in order to institute proceedings in our court, and put me before the bar as a criminal." The same is true, generally speaking, with regard to the introduction of a new instrument.

It is only a few years since the use of the clinical thermometer, the stethoscope and hypodermic syringe have become general. The ophthalmoscope, one of the most valuable aids in the diagnosis of disease, has not yet become common in the hands of the general practitioner.

I hope, gentlemen, that in this disconnected review of the history of laryngoscopy, I may have said something to renew your interest in the use of this instrument of which the late Dr. Louis Elsberg once wrote: "The difference between him who uses and him who does not use the laryngoscope, still is, in many affections, the difference between him who endeavors to grope his way in the gloom of the darkest night and him who walks securely under the light of the effulgent sun."

If you once gain a thorough mastery over the use of the reflecting mirror of the laryngoscope, you will find that you have but one step further to be able to use the rhinoscope to examine the post-nasal cavity, the otoscope to examine the ear; and you will find it of inestimable value in examining the nose and throat in many cases, such as diphtheria, scarlatina, pharyngitis, tonsilitis, catarrhal affections, nasal polypi, ozena, etc., in your daily practice, and also with very little experience you will not be obliged to depend upon daylight for making vaginal and rectal examinations, as you will find reflected light for most purposes preferable, and always at command.

The difficulties of learning to use the laryngoscope have been over-estimated. I fear that the specialists, by reporting their difficult cases and making a great display of electric lights, bull's eye condensers, expensive spray apparatus, electric batteries, etc., etc., have done much to deter the general practitioner from pursuing this line of investigation.

The instruments essential to the proper study of laryngoscopy are very few indeed. A good reflecting mirror with a

head band, which you will find as indispensable to you in your every day work as your pocket case, stethoscope, clinical thermometer or hypodermic syringe, will be of first importance. You will also need two or three laryngoscopic mirrors, one of which will answer as a rhinoscope, also a tongue depressor, two or three flexible probes—the stilets of the ordinary catheters make excellent ones—and a universal handle, an ordinary student's lamp, a powder blower and a hand atomizer completes the outfit, all of which need not cost over ten dollars. And thus you are prepared to make laryngoscopic examinations and treat the vast majority of cases which fall under your observation. It is true, you will meet an occasional case which it will be advisable to send to the specialists, but you will be in a position to give your patient intelligent advice on the subject, and will be able to tell whether the specialist is dealing fairly with your patient, and this is often of great importance in these days when specialists are made in six weeks in our numerous post graduate schools.

PROF. G. C. E. WEBER'S CLINIC AT CITY HOSPITAL, NOVEMBER 1, 1887.

[REPORTED BY DR. S. W. KELLEY.]

The first case was that of the eight year old boy, described as a case of osteosarcoma of lower jaw, on page 408 of our last report.

PARTIAL EXCISION OF INFERIOR MAXILLA.

He was put under ether, Squibbs' stronger ether being used, as is customary at this clinic, a hypodermic injection of one-eighth grain of morphia sulphate and one one-hundred and eightieth of atropia sulphate always preceding the administration of the ether. An incision $2\frac{1}{2}$ inches in length was carried along the lower border of the inferior maxilla, down to the bone, the periosteum being elevated and a scoop applied, which easily broke through the bony tumor and exhibited the sarcomatous nature of the growth, extending

forward as far as the first molar and involving the whole body and ramus. The incision was enlarged forward and met at right angles by a second incision carried vertically downward from the left angle of the mouth. The soft parts were dissected off below and above the bone, and retracted. A gag of rubber was inserted between the jaws on the right side, the first bicuspid tooth of the left side extracted, and the chain saw applied at that point and the jaw sawn through. The first incision was then extended backward to the angle of the jaw, the sawn end of the bone was pressed outward and soft parts dissected down to the periosteum from before backwards, from its inner surface. The tongue was transfixed by a tenaculum and drawn forward. Upon pressing the bone outward to facilitate disarticulation, it broke, being completely disorganized to a shell by the disease, leaving the coronoid process and condyle attached and rendering the disarticulation difficult. They were removed with a few clips of the scissors, and the hemorrhage being checked, interrupted sutures of silver wire were introduced, a simple dressing of iodoform and gauze applied, and the patient sent to bed.

STENOSIS OF THE RECTUM.

Married woman aged fifty-six, of somewhat cachectic appearance. She said she had some trouble of the rectum, which began a year before and was very severe for a while, but was not so painful now. Still it gave a good deal of trouble when the bowels moved, as if the bowel was closed up, preventing a passage and also some of the fæces "came the wrong way," through the vagina. Upon examination a recto-vaginal fistula was discovered, the vaginal orifice being situated posteriorly just within the introitus vaginæ, and the rectal orifice some two inches higher up. From just within the sphincter and for a distance of four inches, the rectum was narrowed and its walls thickened and hardened. At a point three inches from the sphincter this narrowing was so great that it was with difficulty the third phalanx of the index finger could be passed through, although the patient was under ether. The whole rectum was somewhat firmly adherent to its surroundings, and at the narrowest point of the

stricture was firmly fixed to the left side of the pelvis. The question was raised whether it was a sequel of simple abscess surrounding the rectum, or was it of a malignant nature. Judging from the absence of continuous pain and the fact that the vaginal wall adjacent was not indurated nor the vaginal portion of the fistulous tract infiltrated, it was decided to be of inflammatory origin, and is to be treated by gradual dilation with bougies.

ANKYLOSIS.

A blonde German girl of twenty years, who looked the picture of health, was placed upon the table and gave a good family history. Her trouble was at the left knee. She had always been quite healthy until two years ago she had a sickness with high fever, also much sweating, from which she entirely recovered, excepting this knee. Two students were called to examine it. The knee presented an enlargement upon its inner aspect. "O, but, gentlemen, you have not really examined it; you have only just felt of it a little, and, of course, you cannot arrive at a diagnosis by that alone. Ascertain the condition of the joint. Does she walk on it? Is it painful? Does it ever swell more than this? As to mobility, can she bend it? Try it now yourself; can you bend it for her? Compare it with the other knee as to size, shape and mobility. Now what do you find out? It is only painful at present, upon excessive use. She uses the limb right along, but cannot bend the knee. Neither can you get any passive motion. To differentiate this from the muscular or false ankylosis present in inflammation of large joints, and due to involuntary contraction of the muscles from reflex irritation, you will observe that all the muscles are relaxed, and still we can not move the joint.

With this history given and this condition present, we conclude that this is a case of true fibrous ankylosis, resulting from inflammation occurring at the time when she had that sickness, with the great pains and excessive sweating, which was probably an attack of acute rheumatism. In other cases of true ankylosis, more especially from traumatic causes, the union is of osseous structure. Now what

is to be done in such cases? There are several methods of treatment. One is forcibly to break the adhesions, and attempt, with passive motion afterward, to maintain mobility. But sometimes they are very hard or impossible to break, particularly in osseous ankylosis, and Mr. Brainard of Chicago has devised a method of weakening the bone at the point where it is desired to break it, by the application of the principle that inflammation softens bone. That is, by exciting inflammation by drilling small holes through the bone in different directions at the desired point. The trouble is to get rid of your inflammation once excited, and yet maintain the mobility gained by the operation.

Another method is that of Rhea Barton, by excising a wedge-shaped piece of bone at the outer angle of the ankylosed joint. This method, like the others, is more resorted to where the limb becomes fixed in a flexed, inconvenient or useless position.

Another method is the *brisement forcée* of Langenbeck, which is a breaking by sheer force of the adhesions at the joint. The way in which Langenbeck happened upon this method of treatment was as follows: He was intending to amputate at the thigh for the relief of a case of ankylosis of the knee joint where the leg was so fully flexed upon the thigh that the heel was ulcerating the nates. This position making it very inconvenient to perform the amputation, he straightened the limb out by force, in order to get the leg out of the way for the amputation; then observing how well it looked when straightened, he said to his assistants, "We will dress that knee and leave it just as it is, and see what will be the result." The result was a useful limb, and the method being tried successfully in other cases became established. The difficulty of maintaining the joint movable after any and all of these methods of treatment, has led to numerous plans and devices for overcoming it. One Frenchman invented a machine in which the limb could be secured, and so contrived with a hinge at the knee and a series of levers, that the patient himself, by turning a crank with his hands, could make passive motion in his knee. In a great many cases we have

to content ourselves with getting the limb into a convenient position and letting it become ankylosed again.

Now this young lady's limb is ankylosed in a straight position, so it is of some use to her. But I propose in her case to endeavor to break the adhesions and secure a somewhat movable joint. The pain she experiences, the tenderness on pressure, and the increased swelling after exercise, indicate that there yet remains some inflammatory action about this joint. First we must remove this inflammation and endeavor to produce absorption of some of this inflammatory deposit. To this end we will counter irritate, employing for that purpose the Paquelin cautery."

ERECTILE TUMOR.

A young lady of eighteen presenting a tumor in the region of the body of the left lower maxilla. It had first been noticed in her childhood, but of late years had seemed larger, so as to become quite a disfigurement. Its size was that of half a walnut. It had been pronounced by her physician to be an aneurism, and ligation of the facial artery had been performed, but with no benefit. The tumor was evidently not a bony growth, being quite movable, although it was so close to the bone that its growth had caused the body of the maxilla at that point to be absorbed, producing quite a hollowing of its outer surface and thinning of its inferior border. On the buccal surface the mucous membrane was very vascular. The enlargement was soft and it was observed that upon pressure being continued for some minutes, the tumor would entirely disappear. No pulsation could be detected. At this stage of the examination the patient began to vomit from the effects of the ether, when Dr. Weber remarked that the tumor immediately distended to more than its ordinary size. It was pronounced a venous angioma or erectile tumor. One of those bundles of deficiently organized veins which become enlarged, and by distending or erecting when extra pressure is put upon the venous system, as in this act of vomiting, coughing and the like, have received this name of erectile tumors. Treatment was proposed by ligating the tumor *en masse*. This was done, subcutaneously, by

passing a Peaslee needle in three different directions around the tumor, thus surrounding it with a stout waxed silk ligature, which was drawn tight and tied in a bow-knot, so that it could be drawn still tighter if necessary. Different methods of treatment were discussed, such as injection of tr. ferri perchlor., with the object of exciting an inflammation which would destroy or seal up the enlarged vessels. This method had not been very satisfactory in the hands of the lecturer, was not without danger about the head or face, and certainly not applicable to the case of a young lady, as it was liable to cause worse disfigurement than the tumor. Cautery by needles passed through the tumor is another method. Excision was another method that might be resorted to, in which case it was remarked that if the operator cut into the tumor he would have most troublesome hemorrhage, while if he cut just around the tumor, it might be excised as readily and with as little hemorrhage as a simple lipoma or other tumor.

ANKYLOSIS OF KNEE JOINT.

German married woman, aged forty-one. She had borne ten children, had had typhoid fever, and experienced a bad getting up after her last baby, two years ago, but still appeared pretty vigorous in general condition. About a year ago she had an attack of rheumatism, which left her with a stiff knee. Upon examination, the left leg was found to be flexed at an acute angle with the thigh and perfectly rigid in that position. The patient complained of no pain. The joint seemed somewhat enlarged, but not tender. It was considered a case of fibrous ankylosis. The limb was not only useless, but an encumbrance. Ether was administered, and the operator grasping the limb in his arms, forcibly and gradually extended the leg, the bands of adhesion snapping aloud in the process. The leg was brought down to a nearly straight position. The patient was ordered to bed, with a ten pound weight to maintain extension and ice bags applied about the knee.

RHINOPLASTY.

An old lady of fifty-five wished to have her nose restored.

Some years ago she had been afflicted with a sore on her nose. She had consulted a "cancer doctor," who pronounced the trouble to be cancer, and submitted to his ministrations. He applied some medicine to remove the cancer, and succeeded in removing the sore and also a goodly portion of the nose, and leaving a cicatrix extending two and a half inches across the cheek, as represented in the accompanying cut

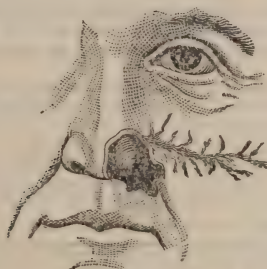


FIG. 1.

The integument at the outer margin of the nostril was growing a bunch of bristly hairs, so this margin was removed. The remaining margin of the nasal opening was pared. An incision was carried horizontally across the face a distance of two inches, following the line of the cicatrix, and the soft parts dissected up from this incision down to near the alveolar attachment of the upper lip. The flap thus formed was carried forward and its anterior superior angle sutured to the tip of the nose. The upper margin of the flap was then opposed to the pared margin of the nostril, thus forming an ala, and to the horizontal incision, and held by interrupted sutures. Dressed with iodoform and gauze.

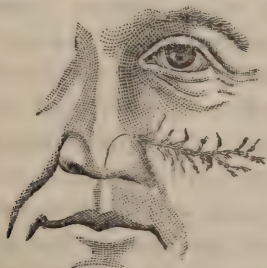


FIG. 2.

Fig. 2 represents the case as it appears a week after the operation. Union by first intention occurred. Further contraction of the flap will in time slightly improve the nostril.

The Cleveland Medical Gazette.

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EDITED BY A. R. BAKER AND S. W. KELLEY.

EDITORIAL.

THE NEGLECT OF CLINICAL STUDY BY MEDICAL STUDENTS.

From a recent letter to the New York Medical Journal, written by "A Traveler from New Zealand," who has been visiting in New York and making a careful study of our hospitals and other medical institutions, we present a few paragraphs. He warmly acknowledges American hospitality, and praises many features of our medical buildings. In regard to our physicians and surgeons he writes :

"Many of them are as accomplished teachers—especially clinical teachers—as any of the older universities can boast ; but what has been especially painful to me to witness is the fact that their services and abilities seem to be unappreciated. In one of your newest hospitals, a few days ago, I heard a gentleman give most excellent bedside instruction. His material was of the best ; he had evidently studied it carefully, by the assistance of an admirably trained corps of resident

medical officers and very efficient nurses, and his manner of presenting his views was lucid, concise and thoroughly scientific. It was painful to me to see that his audience numbered only about a dozen men. I supposed that this was because the hospital fees were very high, and that most of the students could not afford to attend. Inquiry, however, informed me that there were no fees whatever in this hospital, and that every medical student in the city could profit by its teaching absolutely without price. Not only this, but an actual money bonus is paid, so I am told, for a good report of the clinical lectures which are delivered there.

Considering that there are several thousand medical students at work in New York at the present time, I was entirely at a loss to account for this state of affairs.

Can it be that clinical teaching is considered of no account here? Is it possible, with your grand medical advantages, that you rely on didactic teaching solely?

It would seem as though your students *seek a degree rather than an education*, and that your examining boards do not compel them to learn the art of medicine as well as the science.

I could not forbear to lay before you what has been to me the greatest surprise in all my American experience."

We fear there is too much truth in the observations of this correspondent, that not enough attention is paid to the clinical teaching. We have repeatedly heard students leave an amphitheatre expressing dissatisfaction if there had been no operation that day, or no medical or gynæcological case of sensational interest. They seemed to fail entirely to appreciate a skillful diagnosis, the comments and comparisons brought out by a wide knowledge and extended experience, a most sagacious handling of the whole case, with practical points dropped all along the way. Yet these same students would think it necessary to go east or abroad where they could "see something." If they improved their opportunities no better abroad than they did at home they might have seen something and increased their medical knowledge quite as well by going to the theatre. There seems, however,

to be an improvement in this particular in the last few years. Students are more eager to take advantage of clinical opportunities, and we are pleased to note that post graduates and other practitioners more frequently drop in to visit the clinics, or send in cases of interest.

THE AMERICAN DOCTOR ABROAD.

Dr. F. Donaldson, jr., in a recent letter from Berlin to the editor of the *Maryland Medical Journal*, says:

“A very short acquaintance with Berlin physicians and scientists suffices to give the quietus to the American's conceit of American medicine. I do not believe it too broad a statement to say that many Germans do not consider medicine, as such, to exist in America. They certainly have a supreme contempt for our medical schools and our medical teaching. In general one is at a loss at first to account for this state of affairs, for most of the German physicians read English and know well the work and works of prominent men in the different large cities. The immediate cause, however, of this very poor opinion of American medicine is the average medical student who comes to Germany, supposed to study. Of course there are exceptions. As a rule, however, they are uneducated and unscientific men or boys, as the case may be. I have myself come across a number of such cases—one gentleman for instance, who hails from the far west, and who proposes to *finish* his studies in Berlin and will take this semester, Physical Diagnosis, Experimental Physiology, Diseases of Women, Surgery, and Obstetrics. I overheard this gentlemen holding forth on the progress of medicine in the west and he gave this instance of the remarkable strides medicine was making in his native town; *a friend of his in Springfield, Ohio, or Illinois*, has performed eight hundred (!) ovariectomies. A German who heard the story very quietly asked if there were any women left in that part!

Still another was heard to remark, that in America we did not have the time to “*monkey*” with science. When we re-

flect that this city is full of just such men, is it to be wondered that one should be asked, "Do you know cocaine in America," (and this from an intelligent man), and from another, great surprises that we use antipyrine and have seen the tubercle bacillus."

We are quite certain from personal experience while abroad, that Dr. Donaldson is not the only one who has been humiliated by the ranting of young goslings who go over there and pose as representatives of the American Medical profession. Yet in justification of the gentleman from Springfield we may say that he could speak with justifiable pride of his fellow townsman, Dr. Alexander Dunlap, who if he has not made eight hundred ovariectomies has made at least four or five hundred, and who was making ovariectomies twenty years before German surgeons thought of doing so. Is it possible that Dr. Donaldson has not heard of Dr. Alexander Dunlap of Springfield, O. (?)

DR. A. S. BONSTEEL.

We are pained to notice the death of Dr. A. S. Bonsteel of Corry, Pennsylvania. We have always been pleased to number Dr. Bonsteel among our personal friends. He was an honest and conscientious man—one of those exceptional men in whose breast no thought of dishonor ever entered. He was a man who yearned for friendships and affection. Although he was devoted to his profession, and met with much above the average success, he was made out of almost too fine clay to successfully condone the neglect of an unappreciative public. He was fascinated with literary pursuits and often poured out the murmurings of his spirit in poetic effusions which frequently found their way into print, and at the time of his death he was engaged on one of his many literary labors of love. In his death the profession of Erie county have lost one of their most valued consultants, and Corry one of its most active, intelligent citizen physicians.

CORRESPONDENCE.

LETTER FROM WALES.

MEDICAL LEGISLATION—PHYSICIANS DISPENSING THEIR OWN MEDICINES—COMPULSORY VACCINATION, ETC.

Editors CLEVELAND MEDICAL GAZETTE :

SIRS:—I read Dr Jones' article on Medical Legislation in your number for July with pleasure. The wonder is that the Ohio profession has been satisfied with a sham medical law so long. Now is the opportunity of showing what a proper bill should be. The best is far from perfect. Canada, in my humble opinion, has the most perfect medical registration act (barring the re-examination of properly qualified medical men before registration by the different provincial councils) that I am acquainted with, not excepting the medical act in force in this country. There are more quacks here than in Ohio. "Nervous diseases" and "loss of energy" doctors are advertised in every corner in our large and populous cities and towns. About twelve months ago I wrote a short letter to the GAZETTE, in which I stated that we were about having a new medical act. The same has been in force since the thirtieth of June. Under this act colonial and foreign graduates of good schools in such colonies and foreign countries where British graduates are allowed the same privileges, are registered in this country without passing examination. By the way, I hope that section 4403, or a similar clause, will be still retained in any new act that may be enacted in Ohio; but before a person can register here, certain important and essential proceedings must take place, as the following will show. It is copied from the reports of the executive committee on foreign registration to the medical council:

"The clause relating to the registration of foreign graduates, 'to come into operation on or after a certain prescribed day,' and that prescribed day is defined to be the

day on or after this part of the act is declared by order in council to apply to such British possession or foreign country. Moreover, as no such order in council is likely to be issued, except after special application to it made on behalf of some colonial authority or foreign power, the General Medical Council may have to wait for a considerable time before the duties assigned to it under the act, whether as to recognizing or as to registering any colonial or foreign medical title, have to be performed."

Some of your readers would like to hear something about the ins and outs of the profession in this country. I can only speak from experience about the rural fraternity, as my experience in the large towns, except Glasgow for one winter session, has been very limited. One thing will strike your readers as being rather strange, that is the fact that medical men invariably, with the exception of the consultants, dispense their own medicines. The dispensary is called the surgery, which corresponds with the office over there. Even in towns where chemists are plentiful the same thing occurs. In fact, the income of most practitioners in this country is obtained for drugs and medicine sold. They generally keep a young man to dispense the medicines, make the pills, etc. The majority also employ assistants, either qualified or unqualified, who assist in visiting, dispensing, attending obstetrical cases, etc., who generally live and board with their employer and receive a salary ranging from \$150 to \$500 or if they board themselves, \$200 or \$250 more. Every one, before he commences to practice himself, has been an assistant to a medical man for years, more or less.

The diseases we encounter are similar to what you meet with over there. Chest affections are very common. We never meet with ague or malarial trouble of any kind here. Vaccination is compulsory throughout the kingdom. Every child must be vaccinated before he is three months old, which is performed free of any expense by the medical officer appointed for the particular district, and the children are brought to the different appointed stations within every

district at a stated hour to meet the vaccinator, who is paid according to the distance he has to go. The usual fee is fifty cents if within a mile of his own residence, and seventy-five cents for each successful case over that distance, paid by the guardians of the poor out of the rates. Medical inspectors visit the district about every two years to see if the operation is done properly, and it depends on their reports whether the vaccinator will get in addition a government grant of about twenty-five cents a head if placed in the first-class for successful vaccination, or less if only in the second class. It would be of more practical value to a recent graduate to take an assistantship with a good man who has appointments, such as collieries, factories, etc., in this country, than a course of lectures in a medical school; and such appointments are not difficult to secure.

I have already trespassed on your space more than I intended. Wishing you and your readers a Merry Christmas and a very Happy New Year.

W. WILLIAMS,

October 14, 1887.

Llanfairtalhaiarn, Wales.

New Books and Pamphlets.

'DIFFERENTIAL DIAGNOSIS.' A Manual of Comparative Semeiology of the More Important Diseases. By F. De Havilland Hall, M. D., Assistant Physician to Westminster Hospital, London. Third American Edition. Edited by Frank Woodbury, M. D. Philadelphia: D. G. Brinton, 115 South Seventh Street. Cloth. 255 pages.

This, the third edition, has been thoroughly revised and greatly enlarged. The author has consulted authorities with great diligence, and gives us the best points available in diagnosis. He has constructed some valuable tables, the tabular form being used wherever practicable. The chapter on Neurasthenia is admirable, in fact, it is the best we have seen on that subject. The value of the work to the American practitioner is measurably increased by the editor of this American edition. The peculiarities of diseases as manifested in this country have been carefully considered, as is

most evident in the chapter on Fevers, especially the malarial. It is a very useful book.

'REFRACTION OF THE EYE, ITS DIAGNOSIS AND THE CORRECTION OF ITS ERRORS,
By A. Stanford Morton, M. B., F. R., C. S. Ed. Third Edition, P. Blakeston.
Son & Co., Philadelphia, Pa., 1886.

This little work of less than one hundred pages has proved one of the most valuable in our library on the subject of Refraction. The plan which is adopted, viz., that of working out from the symptoms the nature of the disease in preference to the method of naming the disease and then describing the symptoms accompanying it, we believe to be a good one, and if it were more frequently pursued in other branches of study it would be found useful.

These notes are published with a view of enabling practitioners to diagnose and correctly estimate the value of the phenomena indicating the state of a patient's refraction. They make evident the necessity which exists for *personally working out* a large number of refraction cases in order to acquire anything like proficiency in prescribing correct glasses. There is no place where this personal experience in working out a large number of cases of error of refraction can be so well acquired as in the large London Ophthalmic Hospitals, such as Moorfield's or the Royal South London Ophthalmic Hospitals, to both of which Dr. Morton is connected.

'THE MEDICAL NEWS VISITING LIST FOR 1888.' Lea Brothers & Co., Philadelphia, Pa.

This work has been thoroughly revised and brought up to date in every respect. The text portion (48 pages) contains the most indispensable data for the physician and surgeon, including even the latest therapeutic novelties, their doses and effects; while the classified blanks (176 pages) have been rearranged and somewhat condensed, with an obvious gain in convenience. The Obstetric Engagements and Obstetric Practice, for instance, are now together, instead of being separate as formerly. Three styles are now published: Weekly (dated, for 30 patients); monthly (undated, for 120 patients per month); and perpetual (undated); so that THE Medical News Visiting List adapts itself to any system of keeping professional accounts. Each style is in one volume, bound in handsome red leather, at \$1.25. When desired, a Ready-Reference Thumbletter Index is furnished, which is peculiar to this Visiting List, and will save many times its small cost (25 cents) in the economy of time effected during a year.

NOTES AND COMMENTS.

Physician (who visits his patient on the third floor): "Well, I am glad to find you in better condition. You have, of course, followed my directions?"

Patient: "No, doctor, for then I should certainly have broken my neck!"

Physician: "Why so?"

Patient: "Because I have thrown your directions out of the window!"

The Students of the Philadelphia Dental and Medico-Chirurgical Colleges, nearly 400 strong, turned out on Hallowe'en, and serenaded the professors of both faculties. It is said that one of the latter was so overcome with surprise, when the crowd stopped in front of his house, that he got off the most appropriate speech of the occasion. He said, "Let the band play."

Dr. Wm. F. Waugh, Secretary of the faculty of the Medico-Chirurgical Medical College, Philadelphia, Pa., in a recent letter to the editor of the *GAZETTE* says, that "I once attended Charity Hospital Medical College, Cleveland, O., and retain very pleasant memories of my old teachers, especially Scott and Herrick, as well as Shephard and Stull, who were classmates."

As pure an article *can* be made, but a purer article *cannot be* and *is not* made. We are speaking of the Baking Powder of the Great Atlantic & Pacific Tea Co.

Notice.—As Dr. H. S. Byers is no longer our authorized solicitor for subscriptions, we will not be held responsible for debts contracted or money collected by him on account of *MEDICAL GAZETTE*. Physicians who have transacted business with him recently will confer a favor by reporting to us the amount and date of the transaction.

We enclose with this issue a large number of bills for the year ending November, 1888. As we have no agents authorized to make collections of subscriptions to the *MEDICAL GAZETTE*, we hope subscribers will remit directly to this office. This does not apply to Mr. J. N. Wonders, who is authorized to make city collections.

— THE —
Cleveland Medical Gazette.

VOL. III.

DECEMBER, 1887.

No. 2.

ORIGINAL ARTICLES.

ABDOMINAL SURGERY.*

BY DR. S. F. FORBES OF TOLEDO, OHIO.

No subject is of greater importance to our profession at this day than abdominal surgery; and, fortunately, none is receiving greater attention. But little more than a decade ago the peritoneum was not merely regarded by us as a serous sac, but as a sacred sac also. We had cut open the pleura, tapped the dura-mater and aspirated the pericardium even, but with the peritoneum we must keep hands off. It was both a *noli metangere*, and the *opprobrium medicorum*.

Quaint old Abernethy once said that in wounds and obstructions of the abdomen nature and art were powerless, as they stood side by side and saw the sufferer go down to death.

The statistics furnished by the medical and surgical history of the War of the Rebellion give over 80 per cent. of deaths from these wounds, and this does not include those not removed from the battle-field, many of whom might have sur-

* Read before the Northwestern Ohio Medical Society, December, 1887.

vived could prompt and proper measures have been resorted to.

Within a decade, however, an army of brave and earnest workers have revolutionized this field of our labors, and have nearly reversed the above figures, so that now it is asserted that almost 80 per cent. of such injuries and obstructions, and operations within that sac end in recovery. Indeed, Dr. Wylie of New York reports 125 laparotomies done since 1882, with only 12 deaths. While most of these operations were ovariectomies, still, many successful ones were for intestinal obstruction, liver disease, nephrectomies, etc.

The mortality from total extirpation of the uterus has been of late immensely reduced. In 277 operations performed last year by Schröder, Hofmeier, Martin, Olshausen, Fritsch, and Leopold, the per centage of deaths was only 14.5. Fritsch and Leopold have reduced their mortality rate in this operation to 10.1 and 6.2 per cent., respectively.

The purview of this paper, however, is only to deal with penetrating wounds of the abdomen and intestinal obstructions.

While we have learned, in a general way, that the peritoneum may be invaded by the knife with by no means fatal results, still, *when*, and *under what circumstances* we should cut open the belly in the treatment of injuries and obstructions, are questions not so easily settled. If we could accurately diagnose that a penetrating wound of the abdomen also perforated a viscus, or had divided an important vessel, then, of course, no surgeon would hesitate about the operation. On the other hand, if we absolutely knew that a gut had not been wounded, it is not always wisest to refrain from operating, as Dr. McGuire of Richmond reports four cases of gunshot wounds of the abdomen, all of which proved fatal without an operation, though the *post mortem* showed no wound of bowels in either of the cases. Death, in the opinion of Dr. McGuire, was the result of blood-poisoning produced by the absorption of bloody serum poured out by the peritoneum after the wound. The old practice of standing idly by with opium and expectant treatment in these wounds and injuries has

come to an end, and we, gentlemen, must go forward with operative procedures in these cases, or be considered remiss in our duty. In support of this statement I quote a few extracts from eminent authorities in our profession. Dr. Senn of Milwaukee delivered an address before the American Medical Association in May, 1886, in which he used the following language:

“The propriety of resorting to abdominal section in every case of penetrating wound of the abdomen is urged by many, but it cannot be said that this practice is sanctioned by the majority of the profession at the present time. The great difficulty that presents itself to the surgeon in the absence of positive symptoms, is to differentiate between a penetrating and a visceral wound. Clinical experience and statistics have demonstrated the importance of making a distinction between punctured wounds and gunshot wounds of the abdomen, both in reference to diagnosis and treatment. It is well known that penetrating stab wounds are less likely to be complicated by visceral injury than bullet wounds, consequently this class of injuries offers a more favorable prognosis, and does not call so uniformly for treatment by abdominal section. As in stab wounds there is a greater tendency to prolapse of the intestine, exploratory laparotomy for diagnostic purposes is also less frequently called for. The numberless recoveries after stab wounds of the abdomen, without resorting to heroic treatment, must induce every thoughtful surgeon to abstain from subjecting the patient to the additional risks of laparotomy, unless the symptoms are such that the existence of visceral injury can be assumed with a reasonable degree of certainty. It must, however, be remembered in arriving at conclusions concerning the nature of the injury, that the symptoms do not always correspond to the gravity of the visceral lesion; hence, if any doubt remains in the mind of the surgeon, it is justifiable and proper, now that exploratory laparotomy can be made with such comparative immunity, to resort to it, and give the patient the only chance of recovery by ascertaining the exact nature of the injury, which can be the only proper and safe guide to rational and successful

surgical treatment. Dr. Dennis has called special attention to volvulus as another complication of stab wounds of the abdomen, a condition which, when present, would in itself always indicate an abdominal section for its relief. In doubtful cases exploratory laparotomy can be done by enlarging the wound, which, when required, can be followed by the usual incision in the median line when operative treatment of the visceral lesion is required. In gunshot wounds of the abdomen, the course of treatment to be pursued is more definitely settled by accumulated knowledge resulting from careful experimental research and an immense clinical material. These injuries are so uniformly fatal that the slightest suspicion of injury of the intestine calls for treatment by laparotomy as affording the only chance of recovery for the patient. The statement by Otis that gunshot injuries of the small intestines are always fatal if treated upon conservative principles, is practically well established, and is a sufficient argument in favor of treatment by abdominal section. In penetrating gunshot wounds it is highly probable that visceral injury exists, and this fact constitutes a potent argument in favor of surgical interference, which alone is adequate to prevent an inevitable fatal termination. The brilliant results which have been obtained by Bull, Hamilton and others in desperate cases of multiple perforations of intestines, by operative treatment, afford abundant encouragement for imitation of their practice.

It can be justly said that the surgeon who allows a patient to die from the effect of a visceral injury of the abdomen produced by a stab wound or a bullet wound, without at least a proposition to resort to abdominal section, has failed to discharge the duties imposed by the teachings of modern surgery."

At a meeting of the American Surgical Association, held in May last, in a discussion upon this subject, Dr. P. S. Conner said: "The most important point is, when should the abdominal cavity be opened? If there is extravasation of bile, fæces, or urine through the wound, the nature of the injury is clear, but in absence of these signs there is much

doubt. There is no single symptom or collection of symptoms to be relied upon. He had been disposed to attach some value to the presence of profound depression of temperature. If the temperature remains sub-normal four or six hours, penetration by perforation may be considered almost certain.

Diagnostical laparotomy is admirable in certain cases. In private practice we have to be governed largely by the patient and friends. Most of these cases involve legal investigation; and it is a simple matter to show that death resulted not from the original injury but from the surgeon's knife. While he considered it wise to lay down the general rule that penetrating wounds of the abdomen, and still more perforating wounds of the viscera, should be submitted to laparotomy, at the same time he held that we are not justified in laying this down as a hard and fast rule."

Dr. D. Hayes Agnew said that "he had very strong convictions in regard to laparotomy. He believed that when there is a reasonable degree of evidence that there is a penetrating wound of the abdominal wall, especially if a shot wound, it is the surgeon's duty to make an exploratory incision. We are not to be deterred by the possibility of some legal technicality if the case should come into court, but we are to do our duty without regard to the consequences."

Dr. Moses Gunn said: "When Dr. Sims proposed this operation a few years ago, the profession were not ready to accept it. All are now prepared to say that it is a proper measure. But how to make the diagnosis? We have no positive signs of visceral injury, but he thought we are fully warranted in resorting to laparotomy for purposes of diagnosis when in doubt."

At the annual conversazione of the London Medical Society, held on May 2, Sir William MacCormac delivered the address, taking for his subject, "Abdominal Section for the Treatment of Intraperitoneal Injury." Confining his attention almost entirely to wounds of the bowel, the speaker remarked that the diagnosis was of primary importance, as upon its speedy determination must depend the success of

our treatment. If we wait till the diagnosis has been established by the occurrence of peritonitis, the services of the surgeon are no longer called for. To clear up the diagnosis he recommended that the wound should be thoroughly examined, precautions being taken to exclude septic influences. If probing fail to clearly establish the fact, or otherwise, of penetration, the wound should be enlarged and explored to its termination, either in the parietes or more deeply. Enterorrhaphy was at the present time admittedly the best treatment for all punctured and incised wounds attended by protrusion, unless the parts were so damaged that an artificial anus seemed preferable. In cases of stabs and gunshot wounds unattended by protrusion, the common practice, heretofore, had been to give opium and enjoin rest, in the hope that adhesions might form. In the vast majority of instances such hopes were illusory. Another practice commonly recommended was the formation of an artificial anus by attaching the margins of the wound in the gut to the skin; but where it was possible to avoid it, this course was highly undesirable, and it was certainly unnecessary in those cases in which the injury did not extend more than half-way round the gut, or when it was on the convexity of the bowel.

"In cases of injury," remarked the speaker, "we but half accomplish our work if we do not at once attempt to restore the continuity of the intestine."

At the great International Medical Congress held in Washington in September last, several papers upon this subject were read, all advocating operative procedure for these wounds where the diagnosis is well made out, and nearly a similar unanimity prevailed both in the papers and in the discussions, that in cases of doubt exploratory incisions should be made. No attempt will be made to summarize these papers, which would require days to give anything like a fair *résumé* of them. But I cannot fail, however, to allude to the really wonderful labors of Dr. Senn of Milwaukee in this field of surgery, he having been experimenting over five years, and having operated on over 300 dogs, or other animals, in that time.

Furthermore, in the spirit of national pride, I remark that it was fully conceded that in this field of surgery American surgeons were in the van. The following extract from the New York Medical Record will give an idea of the drift of the discussions on this subject:

“The foregoing papers upon this subject (Penetrating Gun-shot Wounds of the Abdomen) elicited a very interesting discussion, in which Dr. Thomas G. Morton of Philadelphia took a prominent part.

The first point to be considered, the speaker said, in the treatment of these wounds, is whether the patient is in a proper condition for an operation; upon this depends the success of many operations. Another point of great importance is the positive knowledge of the existence of a perforation of the intestines or other abdominal organs, or even of a mere penetration of the peritoneum, without such complication. There being no doubt in the surgeon's mind as to these points, he should not, in the speaker's opinion, have the least hesitation in opening the abdomen. There exists, in all cases of penetration, a possibility of loss of blood from some severed vessel, and of the escape of fecal matters into the peritoneal cavity.

The abdomen should always be opened under the strictest antisepsis; through its potent aid the operation is attended with little danger. In cases of stab wounds of the abdomen, with perforation of the peritoneum, he would advise making an incision sufficiently large to enable the surgeon to clearly see what he is doing, and, having secured any bleeding vessels, to wash out the cavity with a warm solution of bichloride of mercury, a $\frac{1}{10000}$ (!), until the water returns perfectly clear, and then sew the wound in the usual way. He preferred, in the great majority of cases, to make the incision over the middle line, except in perityphlitic abscess, when he made a curvilinear incision over the most prominent parts of the abscess. His experience had taught him that a large incision is better than a small one, and safer in every respect. For a gunshot wound he proceeded in the same manner. In a boy, seventeen years of age, with a penetration of the

transverse colon, and a young negro with a similar injury, upon whom he lately performed this operation, the temperature did not exceed 101° and 102° , respectively, and this for the first day only, recovery being perfect and rapid in both cases."

The president, Dr. Smith, adverted to the great importance of this subject. What we want, to deduce conclusions for our future guidance, is an accumulation of facts. Dr. Morton, by his remarkable success in these cases, which success was not, it may be confidently asserted, the result of mere chance, and the New York surgeons, with their recent experience, had, he thought, been accumulating such facts very rapidly. In the light of these facts the legal responsibilities of the surgeon should be considered. The president concurred with Dr. Morton in his views as to the possibility of modifying antiseptics to meet the exigencies of the battlefield.

Time will not permit any further quotations on this branch of this subject.

A few points on intestinal obstruction.

In the days ago it might be truthfully said that in all cases of complete and permanent obstruction of the bowel, the patient was doomed to speedy and certain death. In a very few instances adhesions to the abdominal wall took place; an abscess formed and broke externally, and nature formed an artificial anus, and a miserable existence was maintained. It might be safe to say, however, that in one hundred cases of permanent intestinal obstruction, there would be about ninety-nine deaths in consequence thereof.

The surgery of to-day, however, furnishes much more comforting results. Here, as well as in wounds of the abdomen, a correct diagnosis of the trouble is generally difficult to make out. Upon this point, Dr. Sutton of Pittsburgh uses this language in the *American Medical Journal*, January, 1887:

"Many cases will present themselves in which a diagnosis is not possible. It will not be possible to determine anything beyond a certainty that the disease is within the

abdominal or pelvic cavity. A tumor may be present; no certainty of its relations may be ascertainable through the closed abdominal wall. What is to be done? Will we satisfy our consciences that our duty is done and turn away, or temporize with drugs? It is to be hoped not. In every man or woman dying from an obscure intra-abdominal trouble an exploratory incision should be made, and the diagnosis should, if possible, through it, by touch, or touch and vision, be perfected.

At the last meeting of the Medical Society of London, held in November, Mr. Treves read a very suggestive paper on the 'Diagnosis and Treatment of Chronic Intestinal Obstruction.' Mr. Treves remarked that for diagnostic purposes cases might be classified in four groups: 1, Fecal accumulation; 2, stenosis of colon; 3, stenosis of the small intestine; 4, chronic intussusception. This order represented their relative frequency, fecal accumulation being the most common, and chronic intussusception the least frequent. No form of obstruction was more difficult to diagnose than the latter. Out of 55 cases collected by Rafinesque, no fewer than 27 were the subjects of an incorrect diagnosis. The invagination-tumor had been met with in about fifty per cent. of the cases, but in only thirty-two per cent. of the cases did it reach the rectum. Blood in the motions had been recorded in about half the instances of the chronic form. Vomiting was entirely absent in about half the collected cases. The symptoms caused by stenosis of the small bowel were marked by great variations. The onset was usually gradual. The pain was distinctly intermittent. In most cases it was provoked by food. Vomiting was often provoked by food. Stenosis of the colon was in most cases caused by stricture, and in more than half the cases this was cancerous. The most important point in differential diagnosis was to distinguish between stenosis of the colon and fecal impaction. It was as great a calamity to perform colotomy for the latter condition as to persist in the use of enemata and purgatives in cases of cancer of the bowel. The subjects of chronic constipation were mostly adults, and generally fe-

males. The cases causing most trouble to the diagnostician were those in which some temporary mechanical occlusion of the bowel (as by kinking) was effected by the fecal mass, and acute symptoms supervened upon the chronic phenomena. The gradually increasing constipation of fecal accumulation might, unlike that of stenosis, reach an extreme degree before any vigorous attacks of colic or sickness occurred. One symptom was of considerable moment, viz., the extreme foulness of the breath so often met with in fecal accumulation, and almost unknown in the subjects of stricture of the bowel.

As the case advanced the abdomen became distended, but it was rare for coils of hypertrophied bowel to be visible through the parietes. It was especially to be noted that the symptoms of pain and sickness appeared late, and seldom manifested themselves till there was evidence of a distended bowel. The fecal tumor was an important feature, but its characters were protean. Enemata, as a means of diagnosis, were practically useless. Still less useful was the long tube. As to treatment in cases of stenosis of the small intestine, the most important measure was diet. Washing out the stomach might give more relief than narcotics in acute attacks of pain. If the case became steadily worse, laparotomy was the only alternative."

Laparotomy is now being done for obstructions resulting from so many causes that the operator will often find himself in doubt as to the proper course to pursue, even after having got into the abdominal cavity. Schramm has collected 190 cases of intestinal strangulation treated by laparotomy, including three cases, observed by himself in the practice of Mikulicz. He alludes to the difficulties encountered in the diagnosis of these cases, and pleads in favor of early operative interference. Of this number 64.2 per cent. died, the mortality before the antiseptic treatment of wounds being 75 per cent., and since that time 58 per cent. The cause of strangulation and mortality attending each kind may be gleaned from the following table:

27	times, Invagination,	- - - - -	8	cured, 19	died.
49	" Bands or intestinal diverticulum,	13	"	36	"
16	" Adhesions,	- - - - -	7	"	9
11	" Reduction <i>en masse</i> ,	- - - - -	6	"	5
10	" Torsions,	- - - - -	1	"	9
12	" Knotting of bowel,	- - - - -	4	"	8
12	" Internal strangulation,	- - - - -	4	"	8
7	" Foreign bodies,	- - - - -	4	"	3
38	" Neoplasms,	- - - - -	16	"	22
8	" Unknown causes,	- - - - -	5	"	3

Since writing, I find the following in the New York Medical Record:

"CARCINOMA OF THE DESCENDING COLON: THREE OPERATIONS FOR THE RELIEF OF OCCLUSION: RECOVERY.—At a meeting of the Vienna College of Physicians, on November 4, 1887, Von Hacker exhibited a patient on whom an operation for artificial anus was performed in January, 1887, for carcinoma of the colon, with occlusion of the bowel. In May the patient returned, asking that fistula be closed as fæces were passing naturally. This was done, but at the end of June last it was necessary to remove the tumor to relieve the original symptoms which had returned. The patient recovered from the intestinal resection in four weeks and was entirely relieved. The constricted bowel was so nearly occluded that a match could be inserted into the stricture with the greatest difficulty. The tumor was a carcinoma of the cylindrical epithelial type. Billroth remarked that in these cases, when left to nature, the necrosis of the exuberant elements of the cancer resulted in their discharge and in the temporary relief of the stricture; the cicatrization which followed, however, made the occlusion still more pronounced. —*Wiener Medizinische Presse*, November 6, 1887.

For acute invaginations, torsions, kinking or knotting of the bowel, simple manipulation by the hands has been found to relieve the trouble in many instances. For failures to relieve this condition by this method, and for other conditions, the surgeon has the choice of ingrafting of

the bowel above and below the obstruction (done by Senn very ingeniously by using decalcified circular bone plates), resection or the formation of an artificial anus above the seat of the obstruction. It should be observed that, waiving all the immediate results of the operation, the least extent of bowel removed the better. Senn found that the loss of four feet of the intestinal tract in a dog (if he survived the operation) was certain to prove fatal by marasmus or amnesia. Baum removed 137 ctm. of the small intestines of a woman forty years of age. Kœberle resected 2.05 m. of a girl twenty-two years of age, and Kacher has quite recently resected 160 ctm. of bowel of a patient for gangrene, and all three made good recovery. Yet it is the general opinion of all operators that the less the extent of the intestine removed the more certain is the patient to survive the operation and to continue to live thereafter."

A word in relation to the operation and I have done. The toilet of the patient is made as in all operations within the abdomen. The surgeon's hands, knives, the sponges, etc., to be washed in solution of carbolic acid, and the median line to be selected as the point of incision. The vessels should all be secured and the wound dry before the peritoneum is opened. The hand is then introduced and search for the lesion made. If a simple wound of the intestine, it may be sutured without great disturbance of the contents of the abdomen, but if resection is to be done the bowel should be brought out the wound and careful stitching by means of what is known as the Lembert method should be accomplished. This process includes the peritoneal and muscular coats only. The needle is entered about three-fourths of an inch from the cut end of the bowel, passed down until within about one-fourth of an inch from the end, then is inserted into the opposite bowel about the same distance from the end, and carried up one-half inch, then carried horizontally along for one-fourth inch or so, again entered and carried down and across upon the other end of the bowel, and the same process continued until the bowel is surrounded and made tight. Union be-

tween the peritoneal coats often takes place in a few hours. The operator now stitches the cut surface of the mesentery together and fastens its free margin to the bowel over the line of union. All bleeding vessels should be secured and the cavity thoroughly washed out—flushed it is called—by a three per cent. solution of boracic acid at a temperature of 100 to 101. A drainage tube should be inserted and the wound closed in the usual manner.

I am fully aware of many omissions in this paper, and my explanation of this fact is that during the last few weeks I have reviewed the numbers of the New York Medical Record and the American Medical Association Journal of the past three years, hoping to gather all there was therein upon this subject and present it to you in a concise and instructive form. But the subject is so vast that in seeking brevity and conciseness I may have sacrificed much of practical utility. Nevertheless, if I shall succeed in stimulating you to increase your knowledge and improve any opportunity in this field which presents itself, I shall have done something. It is true that, in our sphere as country practitioners, we do not have the facilities and cannot accomplish the brilliant results of our metropolitan brethren, supplied as they are by splendid hospitals and other conveniences; nevertheless, I am satisfied we can do much more than we have hitherto done in this field of abdominal surgery.

ABUSES OF QUININE.*

BY DR. W. H. BEGG, COLUMBUS GROVE, OHIO.

TO-DAY quinine is a therapeutic agent, whose despotic sway few of us have the courage to dispute. At some time, in some stage, of nearly every malady, most physicians fancy they find an indication for, an excuse for, at least, giving quinine. In high temperature it will pull down and in low temperature it will pull up.

"No pulse so high, no pulse so low
But down one's neck the stuff must go."

The last few years have marked a period in the treatment

* Read before the Northwestern Ohio Medical Association, at Carey, Dec., 1887.

of continued fevers with the so-called antipyretics that has most certainly been disastrous to the fever-stricken.

It has become fashionable to give great prominence to the use of the fever thermometer and the one symptom it shows, to the almost utter neglect of all else.

We are now as crazy on reducing temperature with large doses of quinine and other antipyretics as were our worthy sires in hunting down the liver in search of bile to justify the practice of giving large quantities of calomel, and with less reason. But

"Hepatic doctors now are seen no more,
The hunt for bile has long been given o'er.
Whoever would a reputation make,
Deserts the bile, the bugs to overtake."

I know of no therapeutic agent that can do as little good, and at the same time as great amount of harm, as large doses of quinine. It disturbs digestion and assimilation and tends to rack the nervous system, the very things we ought to foster and handle as carefully as our skill will permit. Are we country physicians to blame for doing what our latest text-books recommend? For who of us dare dispute what we see in a text-book on medicine? And why do our text-books do thus? It has become customary to follow our German friends in book-making very closely, more so than it will be in the future, as regards treatment, we trust; and our book-makers must get in the procession or out of the profession. They fancy they have something new and of importance in the way of treatment; then, good or bad, stick to it.

Loomis, in his 'Practice of Medicine,' recommends quinine to the almost entire exclusion of other therapeutic agents in the treatment of typhoid fever. Pneumonitis, laryngitis, and in fact nearly the whole list of acute febrile diseases, quinine is given in doses of from twenty to sixty grains when the temperature is above one hundred and three. Hutchinson, in 'Pepper's System of Medicine,' describes *mild uncomplicated* cases of typhoid fever as getting on well with three or four grain doses repeated as many times daily. Such cases every one knows are those that would get well without any special line of treatment. A quart of sweet milk to a

typhoid patient or one with protracted pneumonia is worth an ounce of quinine, and much less likely to do harm.

We have gotten in the habit of giving this drug, and that is the most that can be said in its defense. Our Celestial brethren of China treat uncomplicated typhoid fever as successfully as did Dr. Hutchinson with his quinine, with the following prescription, according to Dr. Dewey:

R "Three inches dried umbilical cord, one dried snake skin, one fresh tom-cat's head. Boil in five pints of water two hours. Strain and give in tablespoonful doses every three or four hours."

Dr. Dewey says "this is far less apt to derange the stomach and nervous system than quinine, and besides, is a tonic."

When we consult those text-books whose authors contend for the use of quinine in large quantities, for the reduction of temperature, and find that they do not consider high temperature as the most dangerous to life, we are at a loss.

Loomis says heart failure is the most frequent cause of death in acute lobar pneumonia, and in the same paragraph says, "Pneumonia with the highest temperature is *not* the one where heart failure is most marked or occurs earliest." The same authority says, in discussing typhoid fever, that the most frequent causes of death are "Toxæmia, asthenia, suppression of action of the kidneys, œdema of lungs, intestinal hemorrhage, exhaustion, diarrhœa, intestinal perforation, and peritonitis." Yet he maintains that the reduction of temperature by quinine is the great thing to do. Does quinine prevent hemorrhage, diarrhœa, relieve peritonitis, or cause the kidneys to secrete, or hinder perforation? As to asthenia, it will only help along, as quinine in larger doses is a heart sedative, and in place of relieving our patients we only hurry them to the grave. Few of the acute febrile diseases when uncomplicated are dangerous to life, as they are self-limited, but the danger lies in the complications and present line of treatment.

It is claimed by some that after administering antipyretic doses of quinine the fever patient becomes more comfortable. Try forty grains on yourself, then let us have your experi-

ence. Imagine, if you will, a sick man comfortable with fifty sewing machines running in his head and what *little digestion* he had *destroyed*.

Liebermeister says: "After treating more than fifteen hundred cases of typhoid fever with doses of quinine that formerly would have been considered as dangerous to life, gives no results that would indicate any specific influence of the drug over it, nor any to cut the fever short at any stage." Nearly all other writers hold that quinine has no specific effect on fevers other than malarial, except to reduce them temporarily; yet they advise its use. I addressed a letter to twenty prominent members of the profession in as many different parts of the United States, with the following question: Do you use quinine in acute febrile diseases other than malarial, and why? I received nineteen replies as follows: Three answered positively in the negative. Five use it in small doses as a routine practice and eleven use large doses for its antipyretic effect. This, I believe, is a pretty fair estimate of the position of the profession to-day on this subject. Three stand alone out of twenty who have discarded its use; five prescribe it as a matter of habit, simply to give something—why not give sugar of milk? something that is palatable?—and eleven still torture their patients with quinine in doses ranging from fifteen to sixty grains, but all admit that it would be of no use to give it at any other time than just prior to the time when the normal fall of temperature occurs. If it is of so much importance, why not give it in the morning and prevent the rise of temperature.

Do any of the continued fevers run a shorter course now than fifty years ago? Take the statistics of Brand, Liebermeister and others, the duration of typhoid is not lessened, but the death rate much decreased. Is this latter due to the use of quinine, cold bath, etc., or not rather to the discarding of calomel, jalap, antimony and bleeding? Why do not the advocates of quinine give large doses to the old and feeble and to feeble children? If it proves so important in middle life, why not in the aged and young?

We have always contended against the use of antipyretics

in the continued fevers for the simple reason that high temperature does not constitute much of the danger from a given disease. Some patients will apparently be very comfortable with a temperature of 105 and will not receive any injury from it. Others will be more uncomfortable but not simply on account of the elevation of temperature, but from that which causes it. No doubt most of you will say that reducing temperature prevents tissue waste and changes which are found to exist in the viscera after death. It is much more probable that these changes are due to the particular poison which produces the fever. The waste of tissue can be much better counterbalanced by proper feeding, and preservation of the functions of digestion and assimilation. For the fact is, tissue waste is due more to indigestion and mal-assimilation than to high temperature; and that quinine in large doses impedes these goes without argument.

We trust we have been sufficiently plain in our statements, and the object of this short paper will have been accomplished if your attention has been so directed to the subject that when you are at the bed-side, possibly in your anxiety to follow the old masters and do your patients the greatest amount of good, you may be applying energy in the wrong direction.

COMPOUND DEPRESSED FRACTURE OF SKULL, WOUND OF SUPERIOR LONGITUDINAL SINUS, PARALYSIS FOLLOWING REMOVAL OF DE- PRESSED BONE—RECOVERY.

JAMES H. MONTGOMERY, M. D., ERIE, PENNA.

THE following case of cerebral injury presents some points of interest, especially during its progress. It came under my observation while serving as interne at Roosevelt Hospital, New York:

Bridget M——, aged 60, was brought to the hospital early in the evening of June 29, for a wound of the head, inflicted a short time before by a blow from a hatchet, during a brawl.

Examination revealed a compound depressed fracture of the skull of a circular shape, about one inch in diameter, just at the junction of the left parietal and frontal lines. She was perfectly conscious. No paralysis of motion or sensation. Pupils were normal and reacted promptly to light. There was no bleeding beyond a slight oozing from the cut edges of the scalp.

She was immediately etherized, and under full antiseptic precautions, I began to explore the wound with the intention of removing the depressed bone. The wound was enlarged by two incisions, one carried outward, the other backward, reflecting a rectangular flap. This exposed an almost circular opening in the bone fully an inch in diameter. The depressed portion was below the level of the surrounding bone, and fractured through its diameter from before backward, with the contiguous edges depressed and driven together. The edges of the surrounding bone were cut away with rongeurs forceps, until there was sufficient room to seize the outer fragment with a small pair of forceps. It was removed by making gentle traction. The fragment proved to consist merely of the external table—the inner having been separated and still remaining in the wound—but was easily withdrawn. The remaining inner fragment was seized with forceps and carefully drawn outward. Its removal was followed by a copious flow of dark blood from the cranial cavity, the blood evidently coming from the superior longitudinal sinus. A sharp fragment had probably penetrated the vessel, effectually blocking the opening while *in situ*. Pressure made against the inner surface of the skull with a sponge arrested the hemorrhage in a short time. No wound of the dura-mater could be found, and no brain substance was seen. The overlying bone concealed the sinus, preventing any examination. The rough edges of bone were cut off with forceps. A probe swept around the inner surface of the skull detected no depressed fragments. This examination caused a renewal of the hemorrhage fully as profuse as before, but controlled by pressure of the finger until the wound was washed with sol. hydrarg. bichloride, 1

to 2000. The wound was tightly packed with iodoform gauze, which completely arrested all bleeding. Pressure was maintained by a tight bandage; the scalp wound was left open to heal by granulation. At the conclusion of the operation the pulse was 90 and of fair force. Not more than 3 vi of blood had been lost. The patient was then removed to bed and an ice cap applied to head. No ether sickness.

June 30. Rested quietly, sleeping most of the night. She was perfectly conscious, and answered intelligently. Complete paralysis of motion in right lower extremity, with decided elevation of surface temperature of the affected side. Also had retention of urine. Temp. 99°, pulse 100. Diet confined to milk.

July 1. Bandage requires frequent renewal to maintain pressure. Bowels moved naturally. She continued without any change, and no elevation of temperature until July 7, when the packing was removed from the wound. The gauze was scarcely stained with blood. Pulsation of the brain was clearly seen. Scalp showed commencing granulation. The wound of the scalp was lightly dressed with iodoform and iodoform gauze. Half an hour after removal of the packing she had a slight convulsion with noisy delirium lasting about five minutes. She emerged from this perfectly conscious, but with paralysis of motion in the right upper extremity, in addition to the paralysis preëxisting.

July 11. Dura-mater covered by healthy granulations. Pulse and temperature have scarcely varied from normal.

July 19. Granulations began to protrude from the wound and were kept down by pressure. Moved upper extremity for the first time.

July 25. Had regained full power over upper extremity and could move the lower slightly.

July 30. Passed urine for the first time without the aid of a catheter.

August 6. Wound has slowly filled up. The tendency to hernia cerebri was overcome by pressure. She walked without difficulty.

August 18. Wound completely healed. No nervous disturbances of any description remained. She was seen a month later and declared she felt as well as ever.

The Cleveland Medical Gazette.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY

ONE DOLLAR PER ANNUM IN ADVANCE.

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REMITTANCE OF MONEY.—All money should be sent by P. O. Order, Postal Note or Registered letter. In no case should money be sent by check, except on New York or this city.

Original Communications, reports of cases and local news of general medical interest are solicited. All communications should be accompanied by the name of the writer, not necessarily for publication.

All letters and communications should be addressed to the CLEVELAND MEDICAL GAZETTE, No. 143 Euclid Avenue, CLEVELAND, OHIO.

Changes for advertisements must reach us not later than the second week of the month to be corrected in current number, addressed to W. N. GATES, Manager Advertising Department, 10 Public Square.

EDITED BY A. R. BAKER AND S. W. KELLEY.

EDITORIAL.

CANCER OF THE UTERUS—LATEST VIEWS AS TO TREATMENT—NECESSITY OF EARLY DIAGNOSIS.

In a paper read before the "*Central-Verein Deutscher Aertzte*" of Bohemia Professor Schauta of Prague concludes that cancer of the uterus can be radically cured if we are allowed to operate in healthy tissues; although only a few nodules may be found at the vaginal portion of the cervix, some may already have formed at the fundus, apparently quite independently, as even in this incipient stage the disease makes rapid progress to the fundus, while the structures surrounding the uterus are only invaded at a late period. Inasmuch as microscopically and clinically it is impossible to define the borders of the disease, and recurrence in the fundus often takes place after amputation of the neck, he advocates total extirpation of the uterus in every case as soon as the nature of the trouble is discovered. The earlier

the operation the better the prognosis. He places the responsibility for the treatment of cancer of the uterus more than in any other therapeutical question, upon the general practitioner, for the reason that many cases are brought to the operator fatally late.

Every case of catarrh and erosion should be carefully examined as to whether we can discover somewhere a small nodule which may be regarded as cancerous. Consider the age of the patient, and hemorrhages, and inspect the vaginal portion of the cervix for suspicious points showing the following peculiarities: On the surface of the erosion a small nodule projecting, of a dark red or yellowish red and bleeding very easily. These nodules seem at first quite innocent, but excise one (a quite harmless and painless procedure) and examine it under the microscope and you will find all the characteristic signs of cancer of the uterus. Winiwater states the best percentage of cases (*i. e.*, complete restorations to health) is obtained in cancer of the lips, namely, 40 per cent. Total extirpation of the uterus, however, gives 70 per cent.

These results are at variance with those of Dr. A. Reeves Jackson of Chicago, as presented in his paper before Gynæcological Section of the Ninth International Medical Congress.

In reviewing the pathology of the disease, he admits the separated localities of the morbid action of which, in their earlier stage, the surgeon can not know, either before or during operation, which circumstance explains more than any other the frequent failure of operative measures to cure cancer, in that they fail to remove all of the diseased tissues.

In regard to treatment he says: "In all cases of uterine disease in which the diagnosis of malignancy is doubtful, the patient should be given the benefit of the doubt by the prompt removal of the disease, if this be possible. If radical treatment be delayed until an affirmative diagnosis can be made, the chances for success are greatly lessened."

As to the operation, Dr. Jackson writes: "Is extirpation of the cancerous uterus a justifiable operation? I affirm that it is not."

"Owing to the frightful mortality attending the abdominal operation—not less than 72 per cent. and probably considerably more—it has been abandoned, except in a comparatively small number of cases in which the vaginal method is inapplicable."

As to kolpo-hysterectomy, it is "more dangerous and has given worse results than any other method of treatment. It has destroyed and has not saved life. It is an injurious and not a useful operation. It is more rapidly destructive of life than the disease against which it has been used. Hence it should be condemned as unjustifiable." . . . "Partial amputation by means of the galvano-cautery or with the hot iron or with the knife—the latter especially, when followed by the use of caustics or the cautery—has given incomparably better results, both as regards the immediate death rate and ultimate results than ablation of the uterus." In cancer of the cervix, Dr. Jackson favors the "excision of a conical portion including the external os uteri and extending beyond the internal os." As to cancer of the body, he says that "the difficulties of diagnosis are very great and not likely to be settled until the disease has advanced beyond the limits of the uterus," when, of course, its total removal would be impossible.

These recent views, differing so completely in their estimation of total extirpation, are each entertained and advocated by a large following.

Dr. August Martin says: "I recommend the vaginal extirpation of the uterus as the operation, as the means which we ought to apply in cases of cancerous diseases of the uterus, as long as the disease is limited to the uterus itself." He arrived at this conclusion by a consideration of the operations of Fritsch, Leopold, Olshausen, Schröder (Hofmeier), Staude and his own—a total of 311 cases with 47 deaths, or 15.1 per cent. But these results have been objected to as unfair, because only showing the results of exceptionally successful operators. On the other hand, when the disease has affected the fundus, extirpation offers the only possibility of escape from a certain and miserable death,

and, on the whole, the weight of evidence seems to favor extirpation.

In the work of J. Corig Smith, which is the first distinct and systematic book ever published on "Abdominal Surgery," and the most recent treatises on this subject, the author thus expresses himself upon this question:

"I have no hesitation in expressing my belief that, in carefully selected cases, the operation is both justifiable and proper. The immediate mortality does not forbid it. Recurrence is almost certainly not more rapid than in other operations for cancer, and permanent recovery is just as likely to be secured. And, finally, there seems to be an almost unanimous opinion that death after recurrence is not attended with so much suffering, that perforations of bladder and rectum are not so liable to take place after the uterus is removed, and that existence is prolonged."

Upon the question of the pathological history and the necessity of early recognition of the disease, and its curability if radically treated in an early stage, all factions are at one and emphatic. The disease is insidious, loathsome, horrible and fatal. In the early stages, and only in the early stages, is there a reasonable chance of cure. Let every practitioner carefully examine, and without delay, every suspicious case coming under his care and not treat the patient for "menorrhagia" or "change of life" without ever making an examination, as we have sometimes known to be done. Whether from indolence or ignorance, such negligence is criminal.

DR. C. B. GALENTINE.

In the death of Dr. Galentine the medical profession of Cleveland lost one of its oldest members. At the time of his death he was sixty-eight years of age, and had practiced medicine for forty-five years. The first nineteen years of his professional life were passed in Nunda, Western New York. He came to Cleveland twenty-six years ago and has been in active practice in this city since that time.

Dr. Galentine is best known to the profession by his work on 'Hydrate of Chloral in the Treatment of Diphtheria.' Our readers will remember an article by him on this subject in a recent number of the GAZETTE. Dr. Galentine was always charitably disposed and did much to mitigate the suffering of the poor, and the last effort of his in this direction was an active part in the formation of a funeral reform association, of which he was president. Dr. Galentine was buried in accordance with a strict observance of the rules of the association.

DR. C. B. BIXBY.

It is with great sorrow we are called upon to record the death of our friend and classmate, Dr. C. B. Bixby of Mentor, O.

Dr. Bixby, like Dr. Bonsteel, whose death we noticed last month, fell at his post while treating cases of malignant diphtheria. The loss of these two valued lives in the prime of life while enjoying vigorous good health emphasizes the necessity of taking proper precautions against contagion while treating diphtheria. Physicians as a rule do not take sufficient personal care in such matters.

Dr. Bixby will be remembered by the class of '79 C. M. C., as a hard-working, conscientious student, always good-natured, full of fun, and appreciated a joke even when at his expense.

After graduating, Dr. Bixby located in Mentor and at once established himself in a good paying practice, and soon secured a comfortable home, which he shared with two estimable ladies, his wife and his mother.

Three years ago Dr. Bixby took a post-graduate course and continued to be a student up to the time of his death.

During a visit, last summer, to his home, we could not fail to notice in what respect he was held by his patients and neighbors, and were deeply impressed with the possibilities of this country of ours for young men of push and brains like Dr. Bixby.

[Since writing the above, we are informed that Mrs. Bixby has also died.]

FIRST ANNUAL REPORT OF THE PHILANDER
SMITH MEMORIAL HOSPITAL,
NANKING, CHINA.

DR. ROBERT C. BEEBE, the physician in charge, has favored us with this report, from which we take the following abstract which we believe will prove of interest to our readers. Dr. Beebe will be remembered by many of our friends as a member of the class of '79, C. M. C.:

The Philander Smith Memorial Hospital is one of a number of benevolent institutions built on mission ground through the liberality of Mrs. Adeline Smith and her family, who thereby are carrying out the wishes of him whose name this hospital commemorates.

The cost of land and construction of hospital was somewhat over \$10,000 gold, and was given to the Missionary Society of the Methodist Episcopal Church, which society provides for its annual expense and has direction of its work.

The building was formally opened May 27, 1886, and the first patient received June 1.

The building is built of brick, two stories above a foundation of four feet, and this latter laid on a bed of concrete five and six feet deep. It has a frontage of 172 feet, a depth at the centre of thirty feet and at either end of sixty feet. The lower floor is divided into chapel, dispensary, drug room, operating room, reception room and general wards. The upper floor is divided into general and private wards, school room, and rooms for house physician and matron.

The location of the hospital we consider a very good one. It is within the city walls, about five minutes walk from the west gate of the city, but a short distance from the densely populated portion of the city, and yet near to groves, shaded lanes and open hills.

We have five promising students who are now studying anatomy and English. Three of them are graduates from mission schools. They are making very good progress considering the limited facilities we have for instruction. It will be impossible to give them a full and correct idea of

human anatomy without a manikin, as dissection of the human body is not practicable in China. Will not some friend of humanity give the hospital this much needed appliance?

NUMBER OF PATIENTS FROM JUNE 1, 1886, TO SEPT. 1, 1887.

OUT-PATIENTS.	
New Patients, - - - - -	5,175
Old Patients, - - - - -	6,178

Total number of visits to Hospitals by Out-Patients, - - - - - 11,353

IN-PATIENTS.	
Surgical (including Ulcers), - - - - -	60
General, - - - - -	56
Opium Habit, - - - - -	114

Total number In-Patients, - - - - - 230

Among the patients presenting themselves at the dispensary are a great variety of diseases. Indigestion, bronchial troubles and disease of the skin and eye are most numerous. Of diseases of the skin Scabies or Itch holds the grand pre-eminence, and of the eye, granular lids with its sequæ: leprosy is quite common, nearly all cases being the anæsthetic form.

Ague is common and nearly always of the quartan type, which readily yields to quinine. A peculiar idea prevails here in regard to ague. One afflicted with it is supposed to be possessed by an evil spirit. Scabies is seen everywhere, while a few intestinal worms are considered good aids to digestion, but for one to have ague is a disgrace. Ague patients have various ways of telling their trouble when they come for medicine. Usually when asked what their trouble is they will simply point upward with the finger; when further questioned, they blush, look disconcerted, and give some evasive term, as, "the heaven-descended disease," "the can't catch 'em," etc. I took pains for some time to tell these patients that the disease did not come down from heaven, that it rather came up from the earth, and that it was no disgrace to have it. One day a little boy came in, and,

with the greatest alacrity, told me he had the "rising from the ground disease," while his manner and expression seemed to say: "It matters little where the spirit comes from, I have got it, and I want some medicine to kill it."

Enlarged spleens are common, and are usually referred to as turtles. Many with indigestion think they have a turtle in their stomach. The most of these patients have suffered much from many physicians, and are badly scarred by the hot needles used by native quacks. Some come with pictures painted on their body, and I am sometimes requested to use that potent spell. One day I ridiculed the idea to a patient who was adorned with rampant dragons, for the cure of Herpes, and he told me that he was a physician who used that method and had been painted by a brother practitioner.

The number of surgical cases has been quite small. It was some time before we could get anyone to consent to our using the knife, and the most that we have done has been during the recent months. Of late we have had several operations, with very good results; these will bring more, and this coming year we expect to be able to do much more in this direction for the relief of suffering.

We commenced to receive opium patients before we were fairly ready for them, and have not received all that applied. These patients cause more trouble than all others combined. Several times we have been on the point of deciding to receive none at all. But we have had old patients return, after having been away some time, so manifestly improved in appearance and so much benefited by their not smoking opium, that we have thought again that we would endure all manner of trouble and disappointment, if we could occasionally save one from the dreadful habit. Opium patients have to be confined, and everything sent in to them has to be inspected. For a few days they are given pills containing a little opium; this is gradually decreased, and finally entirely withheld. The result is, diarrhœa, vomiting, sleeplessness, general depression, etc., at first, and for some time afterwards great physical debility. The appearance soon greatly improves, and if the pipe is let alone many gain rapidly in

flesh. We have no way of knowing how many are thoroughly cured. We have good evidence that *some* are—equally good evidence that *some* are not.

We have had several escapes while under treatment. One Buddhist priest, although the amount he smoked was not large, could not hold out and ran away one night, escaping through a window he had forced open. When he registered he received quite a rebuke from one of his countrymen, a patient standing near, who remarked: "Oh, you priests can talk very well, but your acts are not equal to your words." His conduct afterwards proved the remark to be quite true in his case.

NANKING, September 1, 1887.

THE CUYAHOGA COUNTY MEDICAL SOCIETY.

THE last meeting of this society, January 5, 1888, was a most profitable and interesting one, and was held for the first time in their new rooms, No. 20 Euclid avenue. About thirty-five or forty members were present. We hope this change in place of meeting will prove of as great benefit to the society as its friends have wished, and certainly the first meeting was a most auspicious one. Now would be a good time for many members of the society who have not taken an active interest in its proceedings to commence work. We were pleased to notice that quite a number of new names were proposed for membership.

PRELIMINARY PROGRAMME OF THE FIFTH ANNUAL MEETING OF THE OHIO STATE SANITARY ASSOCIATION,

TO BE HELD IN THE G. A. R. HALL, CORNER ADAMS AND ONTARIO STREETS, TOLEDO, OHIO, FEBRUARY 9 AND 10, 1888.

PROGRAMME.

THURSDAY, FEBRUARY 9—FIRST SESSION, 9:00 A. M., STANDARD TIME.

"Sanitation in Architecture,"

D. L. Sine, Esq., Architect..... Toledo.

Discussion opened by

Mr. Francis C. Bodine, Architect Mansfield,

Dr. E. R. Eggleston..... Mt. Vernon,

Dr. A. E. Evans..... Columbus,

I. N. Huntsberger, Attorney at Law. Toledo.

"Cremation as a Sanitary and Economic Measure,"

Lew Slusser, M. D..... Canton.

Discussion opened by

Dr. S. H. Smith..... Warren,

Dr. A. W. Hopkins, Health Officer..... Ashtabula,

Dr. E. Westlake, Health Officer..... Gallipolis,

Dr. A. T. Quinn..... Wilmington.

"Children's Homes and Orphan Asylums,"

F. H. Darby, M. D., Secretary Board of Charitable and

Correctional Institutions..... Morrow.

Discussion opened by

Dr. A. G. Byers, member State Board of Charities..... Columbus,

Hon. M. J. Cooney..... Toledo,

General R. Brinkerhoff, member State Board of Charities..... Mansfield.

"Hygiene of the School Room,"

F. C. Larimore, M. D., member Board of Education..... Mt. Vernon.

Discussion opened by

Dr. T. Clark Miller, Health Officer..... Massillon,

Dr. L. G. Thacker..... Defiance,

Dr. J. C. Fahnestock..... Piqua.

"Effects of the Present Educational Methods on the Health of Women,"

C. A. Lee Reed, M. D., Professor of Diseases of Women,

Cincinnati College of Medicine and Surgery..... Hamilton.

Discussion opened by

Prof. E. T. Nelson, Ph. D..... Delaware,

Dr. W. J. Conklin ... Dayton,

Dr. C. H. Reed, Professor of Obstetrics Northwestern Ohio

Medical College..... Toledo.

THURSDAY—SECOND SESSION, 1:00 P. M., STANDARD TIME.

"The Necessity of Uniform Means of Reporting to Health Departments,"

W. J. Scott, M. D., Professor of Clinical Medicine..... Cleveland.

68 *Preliminary Programme of the Fifth Annual Meeting*

Discussion opened by

Dr. Byron Stanton, Health Officer.....	Cincinnati,
Dr. J. M. Weaver, Health Officer.....	Dayton,
Dr. F. Gunsaulus, Health Officer.....	Columbus,
Dr. G. A. Collamore, Health Officer.....	Toledo.

"Village Boards of Health,"

Austin Hutt, M. D.....	Waverly.
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Discussion opened by

Dr. W. S. Jones.....	Waverly,
Dr. J. W. Cooper.....	Bellaire,
Dr. C. C. Fulton, Health Officer.....	Portsmouth,
Dr. W. L. Buechner, Health Officer.....	Youngstown.

"Boards of Health, and Their Relation and Duties to the Public,"

J. A. Martin, M. D.....	Findlay.
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Discussion opened by

Dr. Anson Hurd.....	Findlay,
Dr. H. J. Sharp, member State Board of Health.....	London,
Dr. Geo. L. Hoege.....	Fostoria.

"The Duty of the Public to Sanitary Science,"

G. A. Collamore, M. D., Health Officer.....	Toledo.
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Discussion opened by

Dr. D. R. Silver, member Board of Health.....	Sidney,
Prof. John Simpson, Superintendent of Schools.....	Mansfield,
Dr. H. L. Wenner.....	Tiffin,
Dr. F. W. Brayton.....	Carey.

"House Drainage and Sewer Connections,"

Wm. Owens, M. D.....	Cincinnati.
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Discussion opened by

Dr. A. A. Elliott, Health Officer.....	Steubenville,
Dr. H. E. Beebe.....	Sidney,
Thos. McNeal, Esq., Master Plumber.....	Cincinnati,
Wm. Halley, Esq., Master Plumber.....	Columbus.

"The Ventilation of Sewers,"

John McCurdy, M. D., member Board of Health.....	Youngstown.
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Discussion opened by

Dr. H. J. Herrick, Surgeon-General of Ohio.....	Cleveland,
Fred. G. Halley, Esq., Master Plumber.....	Columbus,
A. G. Daykin, Esq., Master Plumber.....	Cleveland,
James Semple, Esq., Master Plumber.....	Cincinnati.

THURSDAY—THIRD SESSION, 7:00 P. M., STANDARD TIME.

To be held in Memorial Hall.

Address of Welcome—His Honor, J. Kent Hamilton, Mayor of Toledo.

Response to the Address of Welcome,

Prof. Edward Orton, State Geologist.....	Columbus.
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Address by Victor C. Vaughn, M. D., Professor of Chemistry, University of Michigan, Ann Arbor.

President's Annual Address—"The Duty of the Hour,"

E. T. Nelson, Ph. D., Professor of Physiology and Geology, Ohio Wesleyan University.....	Delaware.
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Election of Officers.

FRIDAY, FEBRUARY 10, FOURTH SESSION, 9:00 A. M., STANDARD TIME.

"The Heating and Ventilation of Passenger Coaches,"

R. Harvey Reed, M. D. Mansfield.

Discussion opened by

Prof. Curtis C. Howard, M. Sc. Columbus,

Prof. W. J. Scott, M. D. Cleveland,

Prof. J. Ernst Hackl, M. D. Toledo.

"On Some Points in the Examination of Air,"

Curtis C. Howard, M. Sc., Professor of Chemistry, Star-
ling Medical College. Columbus.

Discussion opened by

Dr. E. W. Morley, A. M., Ph. D., Professor of Chemistry,
University Western Reserve. Cleveland,

Dr. F. W. Blake, A. M., Professor of Chemistry, Columbus
Medical College. Columbus,

William Dickore, A. M., Ph. D., Professor of Chemistry
and Toxicology, Cincinnati College of Medicine
and Surgery. Cincinnati.

"Pure Air within Doors and How to Obtain it,"

Prof. P. W. Search, Superintendent of Schools. Sidney.

Discussion opened by

Dr. W. J. Scott, member Board of Health. Cleveland,

Dr. C. E. K. Bellaire,

Dr. John T. Stutphen, Health Officer. Middletown,

Dr. H. Hendrixson. Columbus.

"How Far has the Science of Ventilation Advanced?"

Isaac D. Smead, Esq. Toledo.

Discussion opened by

Dr. D. R. Silver, member Board of Health. Sidney,

Dr. C. L. Van Pelt, Professor of Hygiene and State Medi-
cine, Northwestern Ohio Medical College. Toledo,

Dr. D. H. Beckwith, member State Board of Health. Cleveland,

Dr. T. Clark Miller, Health Officer. Massillon.

After the reading of Mr. Smead's paper, the Association will adjourn to visit a
school building demonstrating the paper.

FRIDAY, FIFTH SESSION, 1:00 P. M., STANDARD TIME.

"Should Syphilis be made a Legal Bar to Matrimony?"

A. H. Brundage, M. D. Xenia,

C. E. Beardsley, M. D. Ottawa.

Discussion opened by

Dr. J. F. Baldwin, Editor Columbus Medical Journal. Columbus,

Dr. John McCurdy, member City Board of Health. Youngstown,

Dr. J. B. Vail, President Northwestern Ohio Medical
Association. Lima.

"Cholera: first, Causes of Cholera; second, It is Not Contagious; third, Method
of Prevention,"

D. H. Beckwith, M. D., member State Board of Health. Cleveland.

Discussion opened by

Dr. G. C. Ashmun, Health Officer. Cleveland.

Dr. S. P. Wise, member State Board of Health. Millersburgh,

Dr. J. W. Craig, First Vice-President Ohio State Medical
Society. Mansfield.

70 *Preliminary Programme of the Fifth Annual Meeting*

"The Germ Theory the Correct one for the Contagious Endemic and Epidemic Diseases,"

A. G. Longfellow, M. D. Fostoria.

Discussion opened by

Dr. H. M. Lash Athens,

Dr. C. P. Landon Westerville,

Dr. S. L. McCurdy Dennison,

Dr. G. F. Cook, Superintendent Insane Asylum Oxford.

"Meat Poisoning,"

John A. Chesney, M. D. Bucyrus.

Discussion opened by

Dr. J. U. Barnhill, B. S., Lecturer on Toxicology, Columbus Medical College Columbus,

Dr. Ellwood Stanley, United States Marine Hospital Service Sandusky,

Dr. Toland Jones London,

Dr. H. Hathaway Toledo.

"The Necessity for Attention to Mental Hygiene in our Public Schools,"

John C. McClung, M. D., Mayor Leipsic.

Discussion opened by

Dr. C. M. Finch, Superintendent Insane Asylum Columbus,

Dr. Thos. W. Gordon Georgetown,

Dr. R. C. Stockton Reed, A. M., Professor of Materia Medica, Therapeutics, and State Medicine, Cincinnati College of Medicine and Surgery Stockton,

Dr. James G. Nolen, Professor of Mental Diseases, Toledo Medical College Toledo.

Miscellaneous Business.

Introduction of Officers-elect.

Appointment of Standing Committees.

Adjournment.

E. T. NELSON, Ph. D., Delaware, President.

R. HARVEY REED, M. D., Mansfield, Secretary.

The headquarters of the association will be at "Hotel Madison."

Every person interested in public health is invited to be present.

Special rates on all railroads centering at Toledo have been secured for the benefit of those attending the meeting.

CORRESPONDENCE.

MEDICAL SERVICES TO INDIGENT CITIZENS.

MANSFIELD, OHIO, January 6, 1888.

Editors MEDICAL GAZETTE:

Enclosed please find a "clip" from the *Mansfield Daily Herald* of December 31, in which please note the following resolutions passed by our society:

WHEREAS, The law of Ohio provides for a reasonable compensation being paid to physicians and surgeons for professional services rendered to indigent citizens of this commonwealth, and

WHEREAS, Many of these occur annually to physicians throughout the state, in which humanity demands that they receive proper care and treatment, and

WHEREAS, The township trustees, whose duty it is to care for these indigent citizens, do, in many townships, discourage and cripple the proper attention to said citizens by either refusing to pay for medical attention to the same, or by reducing said medical bills to one-third or one-fourth of what would be considered a fair, reasonable amount, thereby either compelling physicians to take an unreasonably low compensation for their services or resort to the expense of litigation to secure reasonable fees, at an additional expense to the township as well as to themselves; therefore be it

Resolved, By the North Central Ohio Medical society, in convention assembled, at Mansfield, Ohio, this thirtieth day of December, 1887, that we deplore and condemn the habit and customs of township trustees in reducing medical bills, rendered for the treatment of indigent and needy citizens, to an unreasonably low compensation, and that we recommend said township trustees to adhere to the letter and spirit of the law providing for the care of said indigent citizens, and thus avoid unnecessary litigation in the settlement of these claims,

which must otherwise be resorted to unless amicably settled and reasonable compensation allowed.

Very respectfully submitted,

R. Harvey Reed, Mansfield; I. A. Myers, M. D., Shelby; J. W. Craig, Mansfield; J. P. Cowan, Ashland; F. C. Larimore, Mt. Vernon; George P. Sattler, Pavonia; E. Stofer, Bellville; J. Harvey Craig, Mansfield; H. H. Smith, Lexington; I. F. Markel, Mifflin; J. S. Stewart, Ontario; A. H. McCullough, Mansfield.

Since then I have entered suit in the common pleas court of Richland county, for services rendered indigent citizens, consisting largely of surgical attendance, which they refused to pay except at about one-third regular rate of charges—a custom they have been trying to establish here against the protest of all the physicians, and which we have finally decided to test by making a test case of mine.

Yours fraternally, R. HARVEY REED.

MEDICAL LEGISLATION IN OHIO.

MORROW, O., Jan. 6, 1888.

DEAR DOCTORS:

Your esteemed favor of fourth instant duly to hand. Much obliged for interest manifested. In reply would call attention to following slip from local paper:

"At the June meeting of the Ohio State Medical society, committees reported and papers were read appertaining to the subject of medical legislation in Ohio. After such limited discussion as the scientific object and character of the convention would permit, the whole matter was referred to the committee on legislation. Dr. Darby's late contempt case, which grew out of a lack of definite legislation, was referred to a *special committee*, Drs. W. W. Jones, Toledo; E. H. Hyatt, Delaware, and R. Harvey Reed, Mansfield, who were instructed to carefully investigate and fully consider its respective merits and demerits, and after taking proper medico-legal counsel, report as to the 'practicability and advisability of its further prosecution before the supreme

court. There is, we learn, a diversity of opinion in the profession as to whether it would be better, under existing statutes and the temper of the public mind, to fight it out by *litigation* or seek redress by the more conciliatory method—*legislation*. A definite conclusion will, doubtless, be reached ere the meeting of the next General Assembly. It occurs to us that, as a means of bringing the two professions nearer together on this and many other mooted points, the organization in Ohio, as in New York, of a medico-legal society would be a step in the right direction. Time for the discussion of these matters could then be had without infringing on that set apart for the consideration of purely scientific subjects."

I am just awaiting the slow motions of A. C. Berlin & Co., Columbus, who have in charge the printing of our transactions, reprints, etc. Have daily and hourly expected my reprints, a copy of which, together with this slip, I intended to at once mail to all interested friends.

Very truly yours, F. H. DARBY.

SANITARY CONVENTION AT AKRON, O.

COLUMBUS, Dec. 30, 1887.

Editors CLEVELAND GAZETTE:

Have just received a letter from Dr. Ashmun requesting me to send copy of programme for the Akron Convention. The programme is not quite ready, but the following is a list of subjects to be presented:

(1) Akron Churches and Sunday-School Rooms; (2) Sanitary Relation of Teachers to School Children; (3) Sources of Water Supply for Towns; (4) Water Supply of Akron; (5) Typhoid Fever a Preventable Disease; (6) Sewers and Disposal of Sewage in Akron; (7) Disposal of Waste Products in Villages; (8) School Sanitation; (9) Sanitary Condition of Akron School Buildings; (10) The Luminous Brain, from a Sanitary View; (11) Report on Theatres and Halls of Akron; (12) The Sanitary Condition of Summit County Infirmary; (13) Hygiene of Occupations; (14) Sanitary Condition of Workshops and Factories in Akron; (15) The Agency of the Lower Animals in Producing and Propagating Diseases Affecting Man; (16) Sanitary Condition of Dwellings and Premises of Akron; (17) Practical Conclusions on the Prevention of Cholera; (18) Origin and Propagation of Diphtheria; (19) Sanitary Management of Contagious and Infectious Diseases.

Convention to be held January 25 and 26. Local Committee—Dr. E. W. Howard, Dr. Wm. Murdock, Rev. T. E. Monroe, Joseph Hugill and David L. King.

C. O. PROBST, Secretary.

New Books and Pamphlets.

LESSONS IN GYNECOLOGY. By William Goodell, A. M., M. D., Professor of Clinical Gynecology in University of Pennsylvania, etc. Third edition, thoroughly revised and greatly enlarged, with one hundred and twelve illustrations, 579 pages. Philadelphia: D. G. Brinton.

This book, as the author says, "is not a complete treatise upon the diseases of women, but mainly the outcome of clinical and didactic lectures." However, there is not much of importance in the practice of gynecology that is not touched upon. The author has opinions of his own and never leaves you in doubt as to what they are. These opinions were formed while actively engaged in gynecology and consequently are of a practical turn, and being given here in the form of lectures they have an entertaining freshness that is not to be found in a formal treatise. For literary style we have seen nothing upon this subject to equal it since Charles D. Meig's 'Woman and Her Diseases,' which was published in '47 and reached its fourth edition in '59. This book of Dr. Goodell's is a sensible teacher, brought fully up to the times, and charmingly written.

We are pleased to see that Dr. D. G. Brinton, since resigning his position as editor of the *Medical and Surgical Reporter*, is devoting his attention to the publishing of medical books, and we shall expect from this publishing house only books of the highest order of merit.

INSANITY: ITS CLASSIFICATION, DIAGNOSIS AND TREATMENT. A manual for students and practitioners of medicine. By E. C. Spitzka, M. D. Published by E. B. Treat, New York. 424 pages octavo, illustrated. \$2.75.

The title of this book might have read, 'A Manual for Students and Practitioners of Medicine and Attorneys at Law;' for although discussion of the legal aspects of insanity has been avoided, yet the lawyer would find in this book a typical presentation of the most advanced views of a medical expert of the day. Opposing counsel might wish nothing better to pounce upon with overwhelming ridicule than the following which is the author's definition of insanity, and

which he admits, and no one will deny, "labors under the disadvantage of length:"

"Insanity is either the inability of the individual to correctly register and reproduce impressions (and conceptions based on these) in sufficient number and intensity to serve as guides to actions in harmony with the individual's age, circumstances and surroundings, and to limit himself to the registration as subjective realities of impressions transmitted by the peripheral organs of sensation, or the failure to properly coördinate such impressions, and to thereon frame logical conclusions and actions, these inability and failures being in every instance considered as excluding the ordinary influence of sleep, trance, somnambulism, the common manifestations of the general neuroses, such as epilepsy, hysteria and chorea, of febrile delirium, coma, acute intoxications, intense mental pre-occupation, and the ordinary immediate effects of nervous shock and injury."

In other words, insanity is what is left after excluding everything not insanity.

This lengthy, branched, modified and qualified definition, while all comprehensive if not easily comprehensible, will illustrate what a difficult matter it is to define insanity, and also illustrate the author's style of writing. He is not easy to follow on account of this involved "wheel within a wheel" complicated composition. The thoughts are better than the statements. The author's knowledge of his subject is undoubted and his opinions up to latest developments in histology and pathology. We are pleased to note that although he takes pardonable pride in these modern advances in pathological anatomy, he still admits that there may be insanity without the slightest discoverable lesion of the brain. This, from so high an authority, is quite a relief after reading so much braggadocio from some who would make us believe that nature has not a secret left which they have not espied through a lens or discovered in a test tube.

Altogether Dr. Spitzka's treatise is excellent when one gets at his meaning, and no one who is really interested in insanity will fail to read it.

NOTES AND COMMENTS.

Contagious diseases for the month of December in Cleveland, Ohio :

CASES REPORTED.		DEATHS.
Diphtheria,	148	51
Scarlatina,	49	3
Typhoid fever,	18	7
Measles,	7	1

G. C. ASHMUN, M. D., Health Officer.

A Berlin merchant was recently sentenced to eight days imprisonment for selling "St. Jacobs Oil" as a medicine.

We are indebted to Parke, Davis & Company of Detroit, Michigan, for a fine portrait of Sir Morell Mackenzie.

It is said there are real lepers running wild in the streets of Philadelphia. Care should be taken to prevent their getting lost in the high grass.—*New York Graphic*.

Mr. Huntington has recently donated \$500 to the Medical Department of the Western Reserve University for the purpose of purchasing microscopes. Let the good work continue.

A. B. Palmer, M.D., LL.D., Dean of the Department of Medicine and Surgery and Professor of Pathology and Practice of Medicine in the University of Michigan, died on the evening of the twenty-third of December, 1887, aged 72 years.

We are pleased to announce that Dr. C. Sihler of this city, who is well-known to the readers of the GAZETTE as one of our most valued contributors, has been appointed "Instructor in the Pathological Laboratory of the Medical Department of Western Reserve University."

Dr. W. W. Jones has favored us with a programme of the meetings of the Toledo Medical association for the year 1887. The association numbers fifty-four members, meets the second and fourth Fridays of each month, and is divided in six sections, and the essays and subjects for discussion are chosen for one year, so that members have an opportunity to prepare themselves for the discussions.

We were recently shown a bottle of pills which one of our druggists had prescribed for a young lady suffering with indigestion. The label bore the name of a prominent firm of manufacturing pharmacists, and the following formula: "Pill aphrodisiac—Ext. nux vomica, 1-4 gr. ; phosphorus, 1-30 gr.; ext. damiana, 2 grs." She said the pills made her mouth taste like matches and didn't seem to help her.

Weights and Measures.—We wish to draw the attention of writers to the following from "The Physician Himself," page 74, which conveys a very sensible suggestion: "The recent attempt to supersede the old weights and measures by the metric system did not succeed; it is, therefore, scarcely worth while to weigh its merits. When you report cases or publish anything in which weights are given, either use the old familiar weights and measures (which everyone understands), or give both the old and the metric; to use the metric only savors of pedantry. Many make no attempt to carry the metric equivalents in their minds, and if you give metric measures only, they may pass your effusions by without getting the information you wish to convey."

Per Cent. Versus Per Ounce.—Who or where originated the indefinite fashion of indicating the strength of solutions or other preparations by the term "per cent." when "grains per ounce" are really meant? This inaccurate expression we hear on every hand, and of late we meet it even in medical literature. When five or ten grains of a drug to the ounce of the vehicle are wanted, the preparation is sometimes spoken of as a five or ten per cent. solution or

ointment. Why this phrase should be lugged from the commercial world into the medical, who can tell? For brevity? Why wouldn't it be as brief to say ten per ounce. Why say five grains to the hundred when you don't mean any such thing? It is understood? Not always. Such inaccuracies occasion misapprehension and mistakes.

Marie Elizabeth Zakrzewska.—In Vol. XV. of 'The Library of Universal Knowledge,' 1882, at page 638, we read; "Zakrzewska, Marie Elizabeth, b. Berlin, 1829; studied medicine, in which she became proficient. Leaving Germany on account of the prejudice against female physicians, she came to New York in 1853. Having taken a medical degree at Cleveland college, Ohio, she returned to New York, where, in association with the Blackwell sisters, she founded the New York infirmary, of which she was resident physician for two years, when she settled in Boston, where she established the New England hospital for women and children." By reference to the record of Cleveland Medical College, we see the name of Marie Elizabeth Zakrzewska in the graduating class of '56.

Medical Registration in Nebraska.—Judging from the enclosed extract from a recent private letter from Dr. Charles Rosewater, Ohio is not the only state suffering from the lack of a medical registration law:

"On account of the lack of a proper law of medical registration we are having a large influx into this state of a lot of miserable quacks and shysters. I came across one case yesterday which illustrates their doings—a subclavicular dislocation of the humerus, which had been treated for four weeks by liniments and hypodermatic injections (of what I cannot tell) without the slightest attempt at reduction. I chloroformed and succeeded in reducing the dislocation after considerable difficulty. I could enumerate several other similar cases of improper diagnosis and criminal neglect in treatment."

That Old Black Cat.—Will it be believed that in this enlightened nineteenth century, in the favored land known as the United States, and in this progressive city of Cleveland, the following conversation recently occurred between two young lady pupils of the Central High school?

First young lady: "Have you heard about poor old Mr. Blank? He's entirely helpless and confined to his bed. Seems to be all paralyzed on one side. The doctors say he cannot be cured."

Second young lady: "Is that so. Well, I'll tell you, there's only one thing that will cure him. My grandfather had the same complaint and it cured him. If they'd just go to work and take a black cat, one that is black all over without a speck or hair of any other color about it, and take an axe and split the cat open alive and just take and lay it onto that side, he would be cured."

Will those superstitious old notions never become extinct? This sable feline seems like the Black Cat of Poe's weird story, which after being mewed up in a brick wall comes forth to tell a tale of folly which we had hoped was buried.

Two New Cures for Consumption.—It will be a matter of regret to those who have had friends or patients die of consumption, and who has not, that this important information did not arrive sooner; viz., there have been two new cures for consumption discovered, to say nothing about Berjeon's treatment, which is about to be put upon the shelf with several more that did not prove to be all that was expected of them. One of the new ones is the phosphate of copper in a nascent state and soluble in an alkaline body. This is the formula of Professor Luton of Reims:

Neutral acetate of copper o. 15 grain.

Chrystallized phosphate of sodium o. 75 grain.

Glycerine	}	quantity.
Powdered licorice		

This for one pill. It is not stated how often the pills should be taken. A double decomposition takes place in the

stomach. The copper exerts a specific and the phosphorus a dynamic action.

The other cure is that of M. Garcin, with hydrofluoric acid. The apparatus consists of a cabinet, which contains six cubic meters of air. This air is saturated with hydrofluoric acid by pumping it into the cabinet through a gutta-percha bottle containing 100 grammes of the acid to 300 grammes of distilled water. This saturated air is renewed in the cabinet every 15 minutes. The patient is placed for an hour each day in the cabinet thus prepared. It is claimed that under the influence of this acid, the bacilli tuberculosis diminish in number and finally disappear altogether, that cough ceases, appetite improves, night sweats are ended, and that thirty-five out of a hundred patients treated over a year ago remain well at the present time, forty-one were improved, fourteen remained as before, and ten died.

Probably the pneumatic cabinets throughout the country; which do not seem to be utilizing as much wind as they did a few months ago, may be used with the hydrofluoric acid treatment, and again create a breeze of hope in medical and phthisical breasts.

Apropos to the foregoing, we clip the following from the *Western Druggist*: " 'The Antiseptic Properties of Fluorine Compounds' was the subject of a paper read before the British Science Association by W. Thompson. Of the fluorides and fluosilicates, sodium, potassium and ammonium, the fluosilicate of sodium was regarded as the most suitable as a general antiseptic on account of its non-poisonous properties. It is also odorless, and with but a slightly saline taste, soluble in 150 parts of water. The saturated solution is not irritating to wounds, yet exercises greater antiseptic effect than are due to mercuric chloride solutions (which could not be used without danger from poisonous effects) suggest its preference over the latter."

Cerebral Development and the Nasal Passages.—In a discussion at the recent meeting of the American Surgical association on the degenerate condition of the nasal passages in

man, Dr. Allen remarked that the existence of erectile tissue in the nose may be explained by the very short passage for the air. There is no question that the nasal chambers in man are exceedingly degenerate. In the first place, they are disproportionately small. The proper development of them is only to be found in long-faced animals, such as the horse. In man the brain cavity has gradually encroached upon the bones of the face, so that the nasal passages are very much shortened. It is a rule that structures in process of degeneration are always excessively variable, and paleontologists are agreed that as an organ approaches extinction it shows the greatest variety of forms; so that the great number of abnormalities in the nose of civilized races of men, and its liability to disease, are the natural result of its degenerate condition. There is one point to be especially observed. It is that animals with short noses have these erectile bodies in their nasal chambers. In a section of a cat's skull this is well shown; it is also seen in rabbits. It is also supposed to have some protective function. Now, in saying this, I do not say that we can allege the same function for the erectile tissue here as for that which exists elsewhere in the body; but we can state that its function is protective and obstructive; and, as a result of its presence, these bodies will swell up at times and become prominent. The editor of the *New York Medical Journal* says these remarks are interesting, not only from the comparative anatomist's point of view, but as relating to one more illustration, added to the multitude already known, of the directness with which feminine instinct arrives at conclusions that scientific research takes centuries to reach. How can we explain the fondness of women for the pug on any other theory than that they have jumped to the conclusion that, since his cerebrum has encroached more on his nasal area than is the case with other dogs, he is the most civilized of all? And what do they care if that encroachment is considered degeneration?

The condition of the Crown Prince of Germany.—Dr. Morell Mackenzie reports as the result of his third operation upon

the throat of the crown prince of Germany in a telegram to the Medical Record, the entire growth has now been removed by the laryngeal forceps, and the parts beneath are in an apparently healthy condition. Dr. Mackenzie says: "Professor Virchow has examined the specimen and reports that its tissue showed nowhere any alveolar structure, or evidence of emigration of epithelial masses. 'The structure consisted of slender connective tissue, which contained only on its surface enlarged elements, partly undergoing proliferation, but the latter assumed nowhere the character of an independent focal formation.' So far, then, as the microscopical examination is concerned, the disease appears to be essentially of a non-malignant character. The disposition toward limited cell-proliferation may be caused by active inflammatory processes in tissues peculiarly exposed to irritation, but from any other point of view the outlook is not as promising as it might be. Everything in the way of prognosis must now depend upon the fact whether or not there is to be any recurrence of the growth. If the latter obtains, with an increased disposition toward cell-multiplication, the chances for ultimate recovery will be on the wrong side. At present, however, we have reason to hope for the best, and shall await any future developments in the case with becoming interest."

In a recent letter to the *Berliner Klinische Wochenschrift* and London *Lancet* Sir Morell Mackenzie says that: "In my opinion the œdema is due to limited perichondritis, which, in its turn, has probably been set up by the growths which have been formed from time to time in the larynx. Although the nature of the growth which has lately appeared has not been determined by microscopic examination, it presents every appearance of cancer. Dr. Sommerbrod, of the Breslau University, an eminent laryngologist, lectured on the case of the Crown Prince, in Berlin, December 6. He is inclined to the conclusion that it is a case of simple perichondritis, with abscess formation, and not of a cancerous nature; though some difficulty is likely to be presented in the extrusion of several pieces of dead cartilage. He said the prospects of the Prince's recovery were hopeful."

THE

Cleveland Medical Gazette.

VOL. III.

JANUARY, 1888.

No. 3.

ORIGINAL ARTICLES.

LAWSON TAIT ON TUBAL PREGNANCY.

BY W. J. SCOTT, M. D., CLEVELAND, O.

THE following remarkable report of cases, with remarks thereon, by Lawson Tait, which appeared recently in the *Satellite*, may, I think, be published with advantage. There can be no doubt that the proper course in such cases is to operate at the earliest possible moment, but the profession now, as a rule, are not up to this advice.

“In the columns of the *British Medical Journal* I have already reported twenty-three cases of ruptured tubal pregnancy, in which I performed abdominal sections, and tied the bleeding point on account of hemorrhage, which threatened life. All of these cases recovered with one exception, the first in which I operated. I have now to contribute a further group of twelve cases, in which there have been eleven recoveries and one death, as follows:

CASE XXIV.—P. B—, aged 24, married. Sent to me by Dr. Price of Dudley Port, with a letter to the effect that he thought the case he had sent was very like one which I had just recently operated upon for him, and which proved to be

tubal pregnancy. She had missed nearly three months, and was suddenly attacked by violent pain. I operated upon her on February 2, 1886, and found a belly full of clots and dark, purple-colored serum, with a ruptured Fallopian pregnancy of about the twelfth or thirteenth week, the foetus being found immediately alongside the tube on the placenta, *in situ*. I washed the clots freely out and put in a drainage tube. She made a somewhat difficult recovery, but went home on February 27 perfectly well. The diagnosis in this case had been made with perfect accuracy by Dr. Price before I saw her.

CASE XXV.—J. E—, aged 35, married eighteen years. Had suffered severe pain all her menstrual life, had one daughter very soon after marriage. She thought she had three miscarriages six or seven years before, but had no living child. She ceased to menstruate suddenly at the end of January, 1886. She had no symptoms at all until the end of April, when a second attack of pain induced her to keep her bed. This pain continued for about ten days, and she had a feeling of great lassitude and exhaustion, and was noticed to be very pale. She recovered and got up, and about the middle of May another attack of a similar kind induced her to go to bed and call in Dr. Cunningham of Oldbury. A third, and still more violent attack, occurred on the second of June. I saw her, diagnosed ruptured Fallopian pregnancy, operated on the fourth, and found a pregnancy of about the twelfth or thirteenth week of the right Fallopian tube and the abdomen full of clots and bloody serum. I washed it out with warm water, used a drainage tube, and she left the hospital on July first quite recovered.

CASE XXVI.—C. H—, aged 32, married fourteen years. Nine children, supposed to have had a miscarriage at the end of April, 1886, never well after, but she had something like a period after an attack of violent pain in the middle of May. Since then her life was completely burdensome. She suffered intense pelvic pain, and was obliged to be most of her time in bed. On the thirteenth of July she had a severe attack of pain and collapse, after which I saw her and diagnosed rup-

tured tubal pregnancy. I operated on the sixteenth and found my diagnosis correct. The abdomen contained large quantities of clots and bloody serum. I washed it completely out with warm water, employed a drainage tube, and she left the hospital quite well on August 2.

CASE XXVII.—A. H—, aged 34, married; was seen by me at the out-patient department on September 16, 1886. She was doubled up with pain in the lower abdomen and back, which had been going on for some months. She thought she had a miscarriage in the beginning of July. She had a great loss of blood then, which had been getting increasingly worse ever since. I found the cervix shortened and very soft, the uterus fixed and enlarged, with a cystic mass to the left of the cervix, running above it and behind it. She was so exsanguine that she seemed to be in a momentary condition of fainting, and her skin seemed to be tinged with hæmoglobin; the whole of the abdomen was extremely tender. I had no hesitation in diagnosing ruptured tubal pregnancy, the diagnosis being verified at the operation. I found no fœtus, but pieces of the placenta loose in the abdomen, and a large quantity of clots and bloody serum. She never seemed to completely rally from the operation and died on October 2, that is, the fifth day. I could not obtain a *post-mortem* examination.

CASE XXVIII.—G. W—, aged 44, married at twenty-two first time; had one child, which only lived seven months. She was never well after; suffered from menstrual pain. Married second time eleven years ago; no children; menstruation always regular, profuse, and always accompanied by a great deal of pain. Eight years ago she suffered from what was called an attack of inflammation of the bowels; in bed for three months; her health has been very bad ever since. A violent attack of pain came on suddenly on November 5, 1886, from which time she never left her bed, suffering intense pain, until I saw her early in January. She had not menstruated, but there had been irregular hemorrhagic discharges. She was under the care of Dr. Annie Clark, as an out-patient. The whole of the roof of the pel-

vis was fixed, and no diagnosis could be arrived at. I made an exploratory incision on January 26, and found the abdomen full of clots and bloody serum, and a Fallopian pregnancy of about the third month, which I removed. I washed her out thoroughly, put in a drainage tube, and she went home perfectly well on February 13."

Lest I trespass too much on your space, I will omit an extended report of the remaining cases. They all presented a history of sterility for a considerable time previously, then cessation of menses for weeks or months, sudden pain and collapse, diagnosis of ruptured tubal pregnancy (or some serious trouble calling for exploratory incision). Operation—a few hours, two or three days, or weeks, possibly months, after the rupture has taken place. The abdomen found "full of clots and bloody serum," or "so infiltrated and rotten, that nothing could be identified except the stump of the broad ligament," a foetus which had been dead a few hours or several weeks. The patient was always washed out, drained—and in all but two instances out of thirty-five recovered. Mr. Tait then remarks upon this subject as follows:

"Concerning these cases I have first of all to say, that they complete a series of thirty-five operations, performed every one of them under conditions of the utmost gravity, where life was threatened, and I have no hesitation at all in saying that thirty-two or thirty-three, if not all thirty-five, of these lives would have been sacrificed but for prompt interference. Of the thirty-five, only two have succumbed. One, as I have already said, the first on which I operated, because I knew not what to do. I was too long over the operation; I fiddled about securing the bleeding points as they arose, instead of doing, as I always do now—separating all adhesions regardless of the bleeding points, until I get as rapidly as I could down to the base of the tumor, which is the broad ligament. A ligature placed round that and secured, at once arrests hemorrhage; not a drop was ever lost after that. The other case who died, number four, the hemorrhage had already progressed too far; the patient was almost dead at the time I operated. She made a great

struggle to get through, and lived five days and then succumbed. I almost wish in this case I had tried transfusion, but I have no great belief in the efficacy of that proceeding, and therefore did not do it. I think now I have cause to regret, perhaps, not having made the effort.

All the points of my previous papers on this subject are confirmed by the facts of these twelve cases. The diagnosis is not always possible, but it may be made correctly in probably eighty-five per cent. of the cases. The real clue to the nature of the case is a history of sterility for some considerable time, the arrest of menstruation for weeks or even months, a sudden access of pain and collapse, with repetitions of these attacks, as graphically described by Dr. Dolan in his communication concerning his own case. The operation is simplicity itself. Open the abdomen, go at once to the seat of the rupture, that is, the broad ligament, and tie it, for, until you come to absolutely the ligament itself, the tissue is always so rotten and friable that no attempt to arrest hemorrhage in any other way can succeed. Then clear out the *debris*, put in a drainage tube. Of course, amputation of the ligatured mass is a matter of necessity, no one would ever dream of leaving such a thing to putrefy in the abdomen.

Speaking of the treatment of these cases one is obliged to allude to the scheme by which it is proposed to destroy the life of the fœtus and to arrest the growth of the ovum. All I can say is that I am never called into these cases until the discussion of a proposal of that kind is too late, for being engaged exclusively in special practice I have no opportunity of seeing these cases, and never have seen them until the period of rupture. We have then no concern with the fœtus at all; we have to deal with bleeding from the placental structure, and from the maternal sinuses in connection with it. An electrolytic needle under such circumstances would have no more effect than a pinch of snuff. In one of the preparations now laid before you, we have abundant evidence of the fœtus having been dead for weeks, and yet hemorrhage had been going on. The probability is that that fœtus had been dead for ten weeks before the operation was performed, and

yet bleeding had been going on on the morning of the operation. If the cases were seen and diagnosed, as I have already publicly expressed my doubt they could be before the period of rupture, the introduction of an electrolytic needle, if it happened to pierce the body of the foetus, might kill it; but would it kill the placenta, which, as we know in the majority of instances, appears to go on growing when the foetus is dead? There can be no question that in these cases it goes on growing after the foetus is dead. But whether this be the case or not, the propriety of destroying the child before the period of rupture, if its presence in the abnormal position can be recognized, I leave to the discussion of the physicians who see these cases before the period of rupture. When the period of rupture, however, has been reached and hemorrhage is going on, there is nothing, so far as I can see, but for us to follow the surgical rule to cut down and tie the bleeding point.

That I should be able to produce, within the short period of seven years, thirty-five cases of this condition, treated by operation, confirms completely the statement of Dr. Blundell, that it is by no means uncommon. That it has been, when left alone, almost uniformly fatal, is a view which he strongly maintains, and which all evidence confirms. In fact there is a paragraph in Dr. Blundell's writings which sums up all that was known, and all that is known now, save in the matter of operative details, concerning the frequency and cause of this peculiar displacement. "I have never seen any cases of tubular pregnancy in which the tube was of great size. More generally this canal enlarges to about the size of a small fist; sometimes to the size of a pullet's egg only; and in the early part of gestation (say in the second or third month), this cyst bursting open, the child escapes into the peritoneal sac, and the woman suddenly perishes by an internal hemorrhage. Many women, I have little doubt, die in this way; but, being buried without examination, the real cause of their death is never ascertained. Three or four tubal gestations of this kind have taken place

within the circle of my own obstetric acquaintance; whence I infer that the disease is by no means rare."

"Thanks to the progressive emancipation of the professional mind from the thralldom of authority within the last ten years, we have now the means, if we have a reasonable time in which to act, to save at least the 'great majority of these cases.'"

"Briefly stated, what I regard as the true pathology of extra-uterine pregnancy is as follows:

In the first place one or both, generally both, of the Fallopian tubes are so damaged by inflammatory change—desquamative salpingitis—that the procreative machinery is put out of gear. My belief is that the chief function of the cilia of the Fallopian tubes is to prevent the access of spermatozoa, and that, therefore, impregnation takes place in the tube only when deprived of their cilia. Adhesion of the impregnated ovum then takes place to the wall of the tube instead of the wall of the uterus, and then the ovum develops until the tube can no longer expand. Between the tenth and thirteenth week the tube gives way, and upon the position of the point at which the rupture takes place depends the variety of extra-uterine pregnancy, which is developed. By far the most common seat of rupture is out through the surface of the tube into the cavity of the peritoneum, because the proportion of the circumference of the tube, which is covered by peritoneum is very much greater than the proportion of the circumference of the tube which is related, to which is called the cavity of the broad ligament. This rupture into the peritoneum, so far as we can tell, is fatal in an enormous number of instances; what the proportion is we cannot say, but it looks to me as if it were ninety or ninety-five per cent. Enormous sinuses are developed in the tube, and in the mass of the placenta these are torn, they bleed, the hemorrhage is recurrent, and the patients die of hemorrhage into the cavity of the peritoneum, forming the variety of intra-peritoneal hæmatocoele, or they die later on of purulent peritonitis.

No doubt some of the cases must end in the death of the

ovum without much hemorrhage, and become absorbed, but it is perfectly clear that in these cases the tube will remain functionally useless, because it has been sealed probably at both ends by inflammatory disturbance, and therefore will be a perfectly useless organ. So far as we know, in the whole realm of surgical literature there is only one case in which there is the least evidence of what may be called an abdominal pregnancy going to the full time, that being Mr. Jessop's case; and even that is open to the view that it would have been one of the other variety, in which the walls of the ovum cavity and the posterior layer of the broad ligament, ruptured just at the last moment, and the child was found in the cavity of the abdomen. At any rate, except his case, there is no evidence at all of any case in which the ovum has been, or the child has been, developed inside the peritoneal cavity. In fact, considering the harmoniously active digestive powers of the peritoneum, the likelihood of the occurrence of such an incident would be very small.

The second form of rupture, into the cavity of the broad ligament, on the contrary, forms a condition which is, so far as I know, never fatal, or only rarely so, one instance alone having been placed on record in which death has taken place from the hemorrhage. In that case the fatal issue was doubtless due to the rupture of the cyst into the cavity of the peritoneum, so that really the exception is an example of the rule being proved. Doubtless in many of the cases of this variety the ovum dies at once, or is absorbed like an ordinary broad ligament hæmatocele. But in other cases the ovum does not die, but goes on developing to the full time, death, however, occasionally interfering with the progress of the pregnancy at the fourth, fifth or sixth month. Then we have the group of cases in which, after suppuration has taken place, the bones of the fœtus are discharged through the rectum, through the bladder, or through Douglas' *cul-de-sac* into the vagina. Many instances of this have occurred in my practice, as also have cases in which a lithopædion is the result. Such a lithopædion probably would have resulted in Dr. Berry Hart's first case.

The minority of the minority proceed to the full time, and are removed either as living or as dead children. Examples of both I have published at the full time. They are removed from a cavity which Dr. Berry Hart proves completely to be extra-peritoneal.

This last view was what I based all my conclusions upon, that these full time extra-uterine pregnancies were entirely extra-peritoneal; the only place in which they could be was the cavity of the broad ligament, and, therefore, I concluded that they were due to a rupture from the Fallopian tube into the cavity of this structure. Dr. Berry Hart's two preparations absolutely establish the justice of this conclusion.

One remarkable thing about Dr. Berry Hart's section is worthy of notice, because it explains completely the only difficulty which I found in the whole thing. That is, that whilst the peritoneum is lifted right off the pelvis, all round the organs contained in it in every direction but one, it is not lifted from the anterior surface of the uterus. We have, therefore, a prolongation, like the finger of a glove, of peritoneum curving down in front of the tumor, although reaching as far as the fundus of the uterus into the base of the bladder; on either side of this it is completely lifted. This explains what puzzled me greatly in two instances of my operations, that opening in the middle line. I had to close the cavity of the peritoneum after having passed through both its anterior and posterior layers.

These observations of Dr. Berry Hart, as I have already said, completely establish my view of the pathology of extra-uterine pregnancy, and these views of themselves enormously simplify at once the pathology and surgery of the condition."

I consider this worthy of a prominent place in your journal, because, as I have had occasion to observe, the profession at large seems not to be acquainted with these advanced opinions, or, at least, not to accept them, and it is important to extend a knowledge of this interesting and fatal class of cases which now seem amenable to treatment with hope of success. I also wish to remark that not every case of such

accident can be operated upon. I have seen them die in collapse within a few hours after the bursting of the tube. In regard to Mr. Tait's series of cases, it seems to me that he must have tougher subjects to work upon than I have been accustomed to meet. Generally, if the patient survives the first few hours, she develops an acute peritonitis, which soon proves fatal; and on *post-mortem* examination we find not only the blood coagulated, but the folds of the bowels stuck together with inflammatory products. These conditions, we are accustomed to think, would render recovery very doubtful. But if Tait's cases, which have gone on to destruction and putrefaction of blood and tissue, have gotten well by removal of the mass, and washing out and drainage, certainly others will.

BILLROTH AND HIS CLINIC, WITH A REPORT OF HIS LAST RESECTION OF THE PYLORUS.*

BY WM. H. HUMISTON, M. D., CLEVELAND, OHIO.

PROFESSOR BILLROTH is a noble-looking man of medium height, compactly built, large head, broad shoulders, bright, keen, bluish-gray eyes, gray hair, and long, full beard of same color; 58 years of age. Being jovial, kind and inclined to look on the bright side of things, makes him a general favorite among patients, students and associates.

Having been a pupil and assistant of that world-renowned surgeon, Langenbeck, it has given him a prestige that, coupled with his own inherent energy and capabilities, has made him a recognized authority without a superior in the surgical world.

He has the gift of imparting his knowledge to his assistants, for many of them to-day, though young men, are occupying high positions in the various universities of Austria and Germany, and are known to the surgical world by original work. They are Professors Czerny, Gussenbauer, Winiwarter, Mikulicz, Wölfler, Frisch, Sattler, Fuchs and Weil.

* Read before the Cuyahoga County Medical Society, January 5.

His work is thoroughly organized, so that everything runs smoothly, and he does more surgical work in a given time than any surgeon we have seen on the continent. The five wards allotted to his clinic are always full, and yet, except the emergency cases, he does all the operating, and, with few exceptions, in the general amphitheatre before the class.

His working staff is composed of (first) two assistants, Drs. Hacker and Salzer, either of whom is capable for any emergency that may arise; (second) a pathologist and a bacteriologist, which positions are ably filled by Drs. Rosthorn and Eiseler; (third) six general assistants. During an operation each one has a special duty to perform and is held responsible therefor, consequently all move in harmony to attain the highest results possible in a given time. Billroth's antiseptic work is achieved through great difficulties, as the Vienna general hospital is over one hundred years old, badly ventilated, crowded—in fact, totally unfit for the practice of modern surgery; yet his daring and skill make up to a large degree these deficiencies, and his results and observations are astounding. He is an artist of no mean proportions, as is indicated by his unequalled collection of drawings and life colorings of diseased processes, which we have spent hours in looking over. These drawings date back as early as 1851, when he occupied the position of assistant to Langenbeck, in Berlin, and continue up to the present year. His museum is filled with interesting and rare preparations, which is constantly being added to. One could spend much time before he could finish anything like a careful inspection and study of this wonderful collection of surgical and anatomical preparations. The emperor of Austria has recently honored Professor Billroth with a life appointment, making him a member of the house of lords.

His late illness, beginning in May, came very near terminating fatally. Broncho-pneumonia coming upon a disease of the heart (fatty degeneration) that had existed for some time, seemed for a while more than his system could possibly rally from. The intense dyspnoea and cyanosis defied all remedies until the chemist of the university was

called in and prepared oxygen for inhalation, which soon had the effect desired.

After a prolonged convalescence, Billroth went to the mountains, where he underwent the cure for obesity, returning to Vienna and resuming charge of his clinic the middle of October. A great ovation and welcome home was given him by the students and professors of the university.

It was our good fortune to be one of three to receive invitation to witness the operation for resection of the carcinomatous pylorus, which occurred in the private operating room of the hospital. I will give a report of the case from the time of entrance to the hospital until the autopsy was completed. History of patient: male, age thirty-one, married, farmer. Entered hospital December 11, 1886. Family history, good. In 1873 had cholera, but completely recovered. Two years ago began to suffer pain in epigastric region, with a feeling of fullness remaining after subsidence of pain. Last July, without provoking cause, patient vomited for the first time. The vomiting did not recur again until six weeks prior to entering hospital, but in the interval had experienced pain more or less of the time, and had steadily lost flesh, although able to eat his usual amount of food. During the last six weeks has vomited every two days and emaciated rapidly. Bowels obstinately constipated, acting every ten or twelve days. No effect from laxatives or cathartics.

Condition on entering hospital: Emaciation to a marked degree, very weak, skin of yellowish hue, pulse 100, small, temperature $97\frac{1}{2}$, thoracic organs normal. On inspection, the epigastric region was distended, with a prominence to right of medium line. On palpation, a distinct tumor could be felt, consistence hard, surface uneven, movable. No pain on pressure. A space between liver margin and tumor could be determined by percussion.

Since entering hospital patient has vomited copious quantities of dark brown colored fluid (containing mucus and undigested food) after every meal. The chemical analysis of vomited matter shows but a slight trace of hydrochloric

acid. For few days prior to operation patient has been nourished entirely per rectum, with a daily washing out of stomach.

Operation December 19, 1886, 11 A. M. Resection of pylorus under chloroform. The operation had been set for the day before, but the patient was too weak. Nourishing enemata with stimulants freely given, with effect to temporarily strengthen patient. The usual preparations for laparotomy having been made and the stomach washed out, the patient was chloroformed, and incision made from ensiform appendix to umbilicus. The different layers of tissue were raised and divided until peritoneum was open, when the anterior wall of stomach presented with tumor, which was found limited to pylorus. Tumor movable; margins well defined, involving five and one-half inches of greater and three inches of smaller curvature.

The next step was to free this portion of stomach of omentum, which was done by ligation and division by thermo-cautery. A strong clamp forcep was then placed on duodenum near margin of tumor, and a second one a little lower down, and division made between, special sponges removing the secretion from cut ends. A trocar was now pushed through the wall of stomach, near margin of tumor, and a large quantity of dark-colored fluid removed. The stomach was then laid upon an iodoform napkin, and compression of tumor made by the hands of an assistant, and incision began downwards from smaller curvature, cutting down a little ways from margin of tumor towards greater curvature. After cutting a short distance the edges of stomach were immediately united by sutures. This alternating between cutting and sewing was kept up until the circumference of the opening in the stomach was equal to the circumference of duodenum. The tumor was then entirely removed and the stomach and duodenum united by the double suture of Czerny.

The uniting of these structures properly requires great skill, and is very tedious work. After a most thorough toilette of peritoneum, the abdominal incision was closed by three rows of sutures—first, peritoneum united by interrupted suture;

second, fascia and muscle by interrupted suture ; third, skin and subcutaneous tissue by continued suture—all of silk—no drainage—antiseptic dressings and bandage applied. Duration of operation one hour and thirty minutes.

The operation was wonderful in many respects—the ease in which it was accomplished ; the size of the portion resected ; the bloodlessness, and the length of time required to accomplish it. At the close of the operation the patient was as strong as he had been at any time for forty-eight hours previously. Condition after operation—first evening : Great weakness—pulse frequent, 120, small ; temperature $99\frac{4}{5}$. Enemas of wine every three hours. Morning, December 20 : Patient had but little rest during the night—temperature 100, pulse 130. Great thirst—cold milk was given in dram doses every ten minutes, and retained. Enemas of wine continued. Evening : Patient restless ; symptoms of collapse ; temperature 101, pulse 145. Patient gradually became weaker. Collapse and death at 11:30, thirty-five (35) hours after operation.

Autopsy, December 21, by Professor Kundrat. Body emaciated, brain, heart and lungs normal. The abdominal incision closed by sutures, appearance good. At beginning of jejunum circumscribed peritonitis. The incision in stomach and between stomach and duodenum completely closed by sutures, appearance good, no inflammation. Cause of death : Anemia universalis ; peritonitis partialis in consequence of the anemia.

I will here add that several of the cases in which he has performed this operation are still alive and doing well. One of the first cases in which he made this operation lived five years, dying last autumn from a return of the cancer.

A few days ago the professor brought a man before the class in whom he had nine months previously removed the cæcum in which a carcinomatous tumor had developed, the ileum being united to the ascending colon several inches above the cæcum. The man looked well, and had gained flesh rapidly.

SHOULD LIFE INSURANCE COMPANIES REFUSE
TO INSURE THE LIVES OF PERSONS SUFFER-
ING FROM CHRONIC SUPPURATION OF THE
MIDDLE EAR?*

BY A. R. BAKER, M. D., CLEVELAND, OHIO.

ENGLISH life insurance companies refuse to insure the lives of persons suffering from chronic suppuration of the middle ear. Judging from my personal experience a few years since, when I was examining for quite a number of companies, and from the numerous deaths of persons carrying life insurance, traceable directly to disease of the middle ear, I was led to believe that chronic suppuration of the middle ear was not considered of sufficient danger to life to cause a refusal of issuing a life insurance policy, in this country. However, since examining the subject recently more carefully, I find that some of our best companies do consider discharges from the ear "cause for absolute rejection." While they recognize the importance of this subject theoretically, I am still inclined to believe that medical examiners do not give the amount of attention to this subject that its importance demands. I have asked several examiners who make a large number of examinations for our best life insurance companies, "How many persons have you rejected on account of chronic suppuration of the middle ear?" and have frequently been answered, "Not any." The few cases that I have learned of being rejected have been by comparatively young men.

I use the term "chronic suppuration of the middle ear" in preference to the old one of "otorrhœa" advisedly. By the term otorrhœa we understand a discharge or running from the ear. Now it is quite possible to have suppuration of the middle ear lasting for weeks or even months without any perforation of the membrana tympani, and no discharge externally. This is especially true when the suppuration is confined to the mastoid cells. It is in these cases with pent-up secretions either by being confined to the mastoid cells or

*Read before the Northwestern Ohio Medical Association.

non-perforation of the drum membrane, or by polypoid growths, hardened cerumen, foreign bodies or other causes that are dangerous to life. It is probably owing to the relief of serious symptoms due to the spontaneous discharge of pus from the ear which has given rise to the popular belief that a "running from the ear is beneficial." Much to the discredit of our profession, many members of it, if they do not believe in this popular fallacy, do or say nothing to contradict it. It is true the evacuation of pent-up pus is beneficial in that it relieves the immediate fatal tendency of the disease. But the physician who will permit a chronic purulent discharge to continue from the ear for months or years with no effort to check it, under the delusion that the discharge is beneficial, or at least, not harmful, is inexcusably ignorant. Only last week I was called in counsel to see a nineteen year old girl, who had suffered from a purulent discharge from the ear since childhood. The family physician had advised the parents not to interfere with the discharge as she would "outgrow it." The girl died so soon after acute symptoms came on that I did not see her until after death. The *post-mortem* revealed a cerebral abscess. Dr. Roosa says: "Very few persons comparatively, who suffer from chronic suppuration of the middle ear, live out their days, while many of them die very young."

In order to arrive at a clearer understanding of why purulent inflammations of the middle ear are so dangerous to life, it will be necessary to consider briefly some of its most frequent results as inevitably dangerous to the health and life of the patient.

They may be grouped under the following heads, any of which may and do, not infrequently, lead to a fatal issue:

1. Bony growths.
2. Polypi.
3. Mastoid disease.
4. Caries and necrosis of the temporal bone.
5. Purulent meningitis and cerebral abscess.
6. Pyemia, septic phlebitis, thrombosis embolism.

7. Hemorrhage, as the result of erosion of the internal carotid artery.

BONY GROWTHS

May be divided into two classes, congenital and acquired. With the first class we have not to do in this discussion, as they are not the result of purulent inflammation; but as they are relatively frequent, and in old persons, where the auditory canal is naturally narrowed by the altered position of the lower jaw, we may experience considerable trouble from impacted cerumen, because the natural means of removing the wax by the motions of the lower jaw cannot produce the usual effect on the narrowed canal.* The acquired or inflammatory exostosis of the auditory canal are, however, of very serious import to a patient suffering from a purulent discharge from the ear. Here we have a long, bony canal constantly bathed in fetid pus, liable to injury and irritation due to efforts made to remove the dried and hardened secretions, and it is no wonder that we frequently have a periostitis primarily, which is soon followed by a growth of bone. This enlarges with more or less rapidity, until the entire canal is occluded, followed by all the fatal results of retention of pus in the tympanic cavity.

AURAL POLYPI

Are happily met with less frequently to-day than formerly—due to the better methods of treatment employed, and by greater cleanliness on the part of those suffering from aural disease. I could scarcely imagine a polypus growing in an ear kept thoroughly free from pus. Yet, neglected, polypi are probably the most frequent cause of death from ear disease, and at the same time the most easily removed. It would be impossible to tell how many lives could be saved annually by the timely removal of aural polypi.

MASTOID DISEASE.

Post-mortem examinations show that in all cases of purulent affections of the middle ear the mastoid cells are in-

* 'Roosa on the Ear,' p. 483.

volved in the pathological process. It is well to keep in mind the fact that in both acute and chronic mastoid disease the danger to the patient's life is due to the obstruction to the free escape of the products of inflammation; and those cases in which there is a large canal with a large perforation of the membrana tympani and no obstruction from exostosis or polypi are not as dangerous as when these obstructions are present or when there is a narrow canal and a small perforation or none at all. All cases of mastoid disease in which there is tenderness over the mastoid region are to be looked upon as suffering from a very serious disease. The great danger from suppuration and caries of the mastoid cells is the liability of rupture through the roof of the autrum mastoidum, either toward the cranial cavity or the cerebral sinus, with all the serious results we shall have occasion, presently, to mention.

CARIES AND NECROSIS OF THE TEMPORAL BONE.

This is a very frequent result of chronic suppuration of the middle ear and one which gives the surgeon very great solicitude as to the recovery of his patient. Purulent discharges will often continue indefinitely, baffling the most skillful treatment. Kept up by carious or necrotic process, out of reach of direct medication, and often not definitely located because the careful surgeon will not use the probe where there is such danger of interfering with important organs. The prognosis in these cases is always guarded, and with the best treatment will frequently result fatally.

PURULENT MENINGITIS AND CEREBRAL ABSCESS.

I wish I could impress upon your minds the fact that, excluding the few cases as the result of traumatic causes, cerebral abscess in the young or middle-aged is almost always the result of chronic purulent suppuration of the middle ear. It seems to have been one of the slowest lessons the medical profession have had to learn, that when a collection of pus was found in the brain after death that it was a pathological process extending inward instead of pus formed primarily in the brain and endeavoring to find its way outward. The case with

which an inflammation can be propagated from the middle ear to the meninges and thence to the brain substance, can be easily understood by a consideration of the anatomical points involved. The brain cavity is separated from the ear by the merest shell of bone, often fenestrated and full of holes in the normal condition. By examining almost any skull, you will see how slight this separation is. A pin can be pushed through it almost anywhere. The only wonder is that more people do not suffer from meningitis and cerebral abscess. But nature seems to have been leniently disposed towards us in this matter, and so long as there is a free opening for the discharge of pus, serious brain lesions are comparatively rare, but let the outlet be closed and we immediately have serious trouble.

I surmise the frequency of death from cerebral abscess and purulent meningitis is very greatly underestimated by physicians in private practice, where *post-mortem* examinations are comparatively rare. Cases similar to the following are not uncommon: A young physician, about twenty-eight years of age, had suffered from purulent otorrhœa for a number of years since an attack of scarlet fever when a boy. Health otherwise good. Was carrying life insurance in several companies. Came home one evening, after a long drive in the country, complaining of headache; had a chill during the night, followed by fever. Headache continued; was not able to leave his bed in the morning; vomited, had a convulsion during the forenoon; intellect became dull, breathing became stertorous, and died early the following morning. *Post-mortem* showed large cerebral abscess.

Or the following case, which came under my observation some years since: A child of about three years was treated for a purulent inflammation of the middle ear for some weeks or months with very little if any improvement. During my absence from town the child was taken quite seriously ill. When I returned I found the physician treating the case for inflammation of the lungs. Child died next day. A *post-mortem* revealed a cerebral abscess as large as a hen's egg; lungs perfectly healthy. If time permitted I might detail nu-

merous cases of death of persons suffering from purulent inflammation of the middle ear, such as the following: A male, sixty-six years of age, had discharge from ear for several years. Went to bed as well as usual; next morning paralysis of one side, also ptosis. Paralysis persisted for some days, became giddy, had severe rigors, drowsy, delirious at times, face flushed, head hot, convulsions, gradually sunk and died in twenty-three days. Autopsy, abscess of right cerebral hemisphere. Or the following: A male, aged twenty, discharged from ear for nearly four years. Head and neck rigidly curved forward and spine curved. Some rotary movements of head; was unable to swallow; died on second day by abscess of pons varolii.

I have collected notes of over fifty cases of this kind from various sources in which *post-mortem* examinations have proven that death resulted from the consequence of suppuration of the middle ear, either from cerebral abscess or purulent meningitis, and this list could be indefinitely extended by reference to hospital reports and the periodical literature of the past few years.*

PYEMIA, SEPTIC PHLEBITIS THROMBOSIS AND EMBOLISM.

Deaths from these causes are not infrequent. The transverse sinus is the most frequently affected where it transverse the temporal bone on the inner side of the mastoid process. At this point it is in very close relations to the mastoid cells. But the superior petrosal or the cavernous sinuses may be involved, and when there is a fissure in the lower wall of the tympanic cavity the jugular vein is very liable to be affected.

These cases run a very uncertain course, but usually terminate fatally. Death occurs frequently within a day or two, with symptoms of cyanosis and collapse. At other times the course of the disease is a chronic one. There may be chills, followed by long periods of comparative good health.

* See Politzer on 'Diseases of the Ear,' p. 526; Roosa Treatise on 'Diseases of the Ear, Table of Fatal Cases, p. 554.

There may be metastatic abscesses and all the series of symptoms of pyemia from other causes.

HEMORRHAGE AS THE RESULT OF EROSION OF THE INTERNAL CAROTID ARTERY.

This, fortunately, is not a common cause of death, as the result of middle-ear disease, although Hessler, in the *A. f. O.*, Vol. XVIII., has published thirteen cases of this kind, and I have no doubt but that other cases could be found in the medical literature of the subject. The prognosis in these cases is absolutely unfavorable in the present state of our knowledge of this subject. I have never met a case of this kind. A colleague of mine lost a case recently from hemorrhage from the ear, but I am not in a position to state the facts in the case.

I think I have dwelt long enough upon the fatal tendency of chronic purulent inflammations of the middle ear to prove that they are unsafe risks for life insurance.

Now, the practical question which presents itself to the life insurance examiner is: Shall we make a sweeping rule and refuse all risks where there is or has been a purulent inflammation of the middle ear? To answer this in the affirmative would be undoubtedly the easiest solution of the problem. But there are cases of purulent discharge from the ear which are or may become good risks, and rival companies will eagerly take them. In order to discriminate intelligently between the comparatively safe and the dangerous cases of purulent inflammation of the middle ear, probably demands an amount of knowledge of ear diseases which the general practitioner does not possess. It seems to me that every such case ought to be referred to an expert for examination. I presume, however, that insurance companies would object to paying the extra fee necessary. Life insurance companies occupy a unique place in the commercial world. They reverse the laws which govern all other commercial enterprises and investments. In the latter, expenditures come first and the profits, if any, afterward. But with life insurance companies the reverse proves true. During the first years of a

life insurance company its coffers are filled to overflowing. The receipts come flowing in from premiums paid and the expenses are comparatively light, and does not reach its maximum for thirty or forty years. Hence the necessity of stringent laws regulating these enterprises, and the necessity of securing good average risks, and the importance of careful, conscientious work on the part of the medical examiner. Until such time as the life insurance companies make some provision for expert examinations, the following suggestions may prove of some practical importance to the examiner in deciding whether a given case of purulent inflammation of the middle ear should be accepted or rejected.

These cases may be arranged in three classes :

1. Cases which may be accepted provisionally, *i. e.*, with an increased premium. (No case can be considered a *first class* risk.) Cases in which the purulent discharge has never been abundant or offensive or bloody; where the aural canal is of large size and free from all obstruction, and there is or has been no tenderness of long duration behind, above or in front of the ear; cases in which there has been no continued pain, giddiness or other severe symptoms of intra-cranial difficulty, and in which there has been no discharge for one year or more. Such cases may be accepted as good average risks, generally speaking, even though there remain a perforation of the *membrana tympani*. These persons should be warned to never go in bathing without first taking the precaution of plugging the aural canal with cotton.

2. Cases which may not be rejected absolutely, but deferred until the affection is removed. This will include a large number of cases of acute, subacute and chronic purulent inflammation of the middle ear, which the examiner may foresee, could be cured by a few weeks or months of rational treatment. These cases should all be referred to an expert for examination and treatment before being accepted.

3. Cases which should be rejected unconditionally are :

1. All cases in which examination reveals a narrowing of the canal from exostoses or other causes.

2. All cases in which there are present polypi or granulations within the tympanic cavity.
 3. All cases in which there are disquantative processes within the middle ear or external meatus.
 4. All cases with symptoms of caries or necrosis of the temporal bone.
 5. All cases with paresis or paralysis of the facial nerves.
 6. All cases with fistula of the mastoid cells.
 7. All cases in which there is an abundant offensive discharge from the ear of long duration, and especially if bloody at times.
 8. All cases in which there is tenderness on pressure or recurrent pain behind, above or in front of the ear.
 9. All cases in which there is giddiness, unsteadiness of gait or other symptoms of cerebral disturbance.
- If all these cases are unconditionally rejected, no great injustice will be done the six hundred thousand families more or less dependent upon the two billion dollars life insurance carried in the United States.

REPORT ON PROGRESS IN GYNÆCOLOGY.*

BY A. B. CARPENTER, M.D., CLEVELAND, O.

IN presenting to the society a report of progress in gynæcology for the year 1887, I shall follow somewhat the classification, as adopted in my report for 1886. The report will be a *resumé*, together with a notice of new literature and necrology.

UTERINE THERAPEUTICS.

This subject has come forward more prominently than at any time since the issue of Tilt's work in 1878, special chapters having been given place in different works on gynæcology—Skene of Brooklyn and Grandin of New York being the most prominent writers in this direction. This is a good omen and speaks well for growing conservatism in the treatment of diseases peculiar to women. It is to be hoped these

* Read before the Cuyahoga County, O., Medical Society, January 5, 1888.

gentlemen may go on, and give us from time to time additions in this direction.

PELVIC PATHOLOGY.

Nothing specially new has come forward in this department since the report of Martins, in regard to diseases of the tubes. He is, however, still at work in this same direction, and has reached the conclusion that only one-fifth of these cases require operation. This also speaks well for growing conservatism. No new literature of note has appeared on pelvic pathology since the issue of Doran's work, which was mentioned in our last report.

ANTISEPTICS.

The antiseptics of the operating room vary according to the individual ideas of the operator, sublimate and carbolic acid probably being in the most general use, although, as is well known, some of the most skillful as well as the most successful operators of to-day use nothing whatever but pure water. There can be no question but that absolute cleanliness is the first and great principle in antiseptic treatment, if not antiseptis itself. For vaginal and uterine examinations sublimate $\frac{1}{2000} - \frac{1}{5000}$, according to the condition and temperament of the patient, is the almost universal agent employed. It is becoming an established fact that vaginal and uterine examinations are now made with less danger to the patient, and with fewer inflammatory conditions following than before the use of antiseptic precautions.

DYSMENORRHOEA.

This frequent ailment, the "bane of bliss and source of woe" to so many women, still haunts us, and another year has passed without bringing a specific surgical or medical form of treatment for this most troublesome and painful disease. Forcible dilatation still ranks first when the trouble is caused by constriction of the cervical canal or internal os, and the intra uterine stem when due to flexions. The stem is strongly

condemned by Emmet, but equally good authority advise its use.

The precautions to be observed are (*a*) the stem must be one-half inch shorter than the uterine canal; (*b*) should not be introduced if metritis or endometritis be present; (*c*) must not be used where tubal complications exist; (*d*) is contra-indicated if peri or parametritis has recently been or is present.

MECHANICAL SUPPORTS.

The year has brought forth nothing in pessaries worthy of note. The disapproval of belts and stems continues to increase.

ALEXANDER'S OPERATION.

The year has made a considerable number of ardent advocates for this plan of treating obstinate retroversion flexion and prolapsus uteri.

VAGINAL EXTIRPATION OF THE CANCEROUS UTERUS.

Our German colleagues across the sea continue their former brilliant records, and the mortality statistics are on the decrease; but German women are totally unlike our high-strung American ladies. They seem to suffer from shock to a limited degree, and rally from this most terrible operation in a manner most extraordinary. A valuable paper by Dr. T. A. Reamy, giving his experience, can be found in the Cincinnati Lancet and Clinic for July 16. The paper is very complete and is worth reading. His statistics are, however, misleading, as they embody both German and American cases, consequently give us no idea of the American mortality after the operation.

EXPLORATORY INCISIONS.

This operation, as a means of diagnosis, is coming more and more into practice. Tait's rule that, when the condition is obscure or the health of the patient permanently impaired by abdominal or pelvic disease, an exploratory incision should be made to find, if possible, the cause of the trouble, thus giving the patient a chance for recovery. This

rule is a good one, and should govern the decision regarding the making of all exploratory incisions for the abdominal or pelvic disorders of women.

OÖPHERECTOMY.

The investigation in the Hospital for Women, Liverpool, referred to in my report last year, regarding the indiscriminate removal of the ovaries, has had its effect, and has resulted, in England, at least, of causing a decrease in the number of these operations. I think the report, censuring as it was, has had an influence in this country as well. Oöphorectomy for certain conditions is an operation of great value, but when it comes to the indiscriminate spaying of women, as was being practiced at Liverpool, a halt should be called. Perhaps one reason for fewer operations of this nature being made during the year past is the bringing forward by Apostoli of Paris a method for the treatment of fibroid tumors of the uterus by electrolysis, as it is claimed by this method hemorrhage is controlled, thus saving the patient from submitting to an operation for the removal of the ovaries.

FIBROID TUMORS.

There has been a decided change in the manner and method of treatment of fibroid tumors of the uterus during the past year. The claims of Dr. Apostoli of Paris are familiar to all, consequently I will not take the time to go into a general detail of his method, but will refer briefly to a few of the more important points.

(a) A patient suffering from a fibroid tumor of the uterus, and with frequent and profuse hemorrhages, can be restored to a fairly normal menstrual condition by the application of strong currents of electricity accurately measured, the positive pole or electrode being introduced in the uterine canal.

(b) The agonizing pain, neuralgic, so-called, can be relieved entirely by the same method.

(c) The tumor can be markedly reduced in size, and in many cases entirely removed by the use of high electric dosage.

(d) To accomplish these effects, "a battery of sufficient power to generate a continuous current of electricity which can be increased to a thousand milliamperes in strength is required. This is necessary in order to obtain the full benefits from this form of treatment."

(e) Also, an instrument for the accurate measurement of the electric current while passing through the patient's body. The resistance of the human body under different circumstances varies so markedly that, unless we use a milliamperemetre, we are absolutely unable to determine the strength of the current used.

For the purpose of further investigating this form of treatment, I paid, a few days since, a visit to Dr. F. H. Martin of Chicago (whose articles in the *Journal of the American Medical Association* and *New York Medical Record* are no doubt familiar to you all). Dr. Martin, while not an enthusiast, is deeply interested in this mode of treatment of fibroid tumors of the uterus, and as a result of this method, *so far*, he informed me that he has yet to find a case where he is unable to control the hemorrhage, or the severe lancinating pains; that he has four cases where the tumor has entirely disappeared, not a vestige remaining. The doctor has met with difficulties in securing a satisfactory form of battery for this work, and he showed me several forms of cells that he has already had in use. I had the pleasure of seeing a test made of a new form of dynamo which, it is designed, will furnish electricity for this and galvano-caustic work. The machine worked well, but the noise made by it will, it seems to me, make it objectionable for office practice. I shall have in use, in a short time, an apparatus which I am in hopes will fulfill, so far as is now understood, the requirements for the treatment of fibroids, and at some future date will be able to give the results of treatment.

NEW LITERATURE.

As especially worth notice, I would mention the 'American System of Gynecology and Obstetrics,' by Lee Bros. & Co., 4 vols., sold by subscription. 'Encyclopædia of

Obstetrics and Gynecology,' by William Wood & Co., sold by subscription; 'Lessons in Gynecology,' by Goodell; also, 'The Annals of Gynecology,' a new monthly journal devoted exclusively to diseases of women, and edited by E. W. Cushing of Boston, assisted by a large number of well-known co-laborers. The appearance of this journal thus far, together with the low subscription price, ought to insure a large support.

NECROLOGY.

I feel that this report should not be closed without a mention of the earnest workers in the field of gynecology who have, during the past twelve months, finished their labors and gone to join the illustrious dead. They are Professor Gallard of Paris, Professor Schroeder of Berlin, Professor Ludwig Bandl of Vienna, and Dr. Alfred Meadows of London.

143 Euclid avenue.

CORRESPONDENCE.

IMPORT DUTIES ON MEDICAL AND SURGICAL INSTRUMENTS AND APPLIANCES.

SAVANNAH, GA., January, 1888.

To the Editors of MEDICAL GAZETTE:

DEAR SIR: At the annual meeting of the Georgia Medical society, held January 3, 1888, the following resolution was unanimously carried:

Resolved, That the corresponding secretary enter into correspondence with the medical journals of the country in order to enlist their influence in support of the movement to remove the import duties from all medical and surgical instruments and appliances, including those used in the diagnosis as well as treatment of disease, so that they may be furnished to those needing them at the lowest possible price.

In compliance with the above resolution, I wish to solicit your earnest attention and a notice in your publication, which will claim the attention of your readers, hoping that your country readers, especially, will appreciate the truth and importance of our proceedings.

Perhaps the statement of a few facts will assist the reader in realizing the extent of the grievance and the justice of the plea for which we ask coöperation.

First. Physicians are at the mercy of instrument makers in regard to price, make and quality of finish, because of the lack of sufficient competition.

Second. The price of instruments made in this country is out of proportion to that paid for similar instruments on the continent of Europe.

Third. Surgical instruments and appliances are so costly that but few doctors entering the profession can provide themselves with an outfit adequate to carry on a general practice. At present prices it is impossible for a country physician's income to sustain his investing in costly instruments, and as a result many simple cases, such as retention of urine, foreign bodies in nose or throat, deep-seated abscesses, etc., all of which could be relieved at once with the proper instruments, must either die from the immediate cause or from the effects of time lost in seeking skillful manipulations, or else they are frequently crippled and disfigured because the most intelligent help, though patiently given, is itself crippled for want of proper instruments.

Fourth. The cheaper grades of instruments are either antiquated or so poorly made that they may prove a cause of failure in operations, sapping, as it were, the natural inclinations to surgery in its inception.

Fifth. European instruments are from twenty-five to seventy-five per cent. cheaper than ours, and their introduction into the market will enable the mass of doctors to buy those of prime necessity, will bring down the price of home-made appliances, and oblige the makers to use good material and put a better finish to their work.

Sixth. The removal of import duties on surgical and other instruments used by the profession and on medicines in general, will produce the same results as we all know it did on the article of quinine.

Respectfully, J. C. LEHARDY,
Corresponding Secretary Georgia Medical Society.

The Cleveland Medical Gazette.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY

ONE DOLLAR PER ANNUM IN ADVANCE.

Vol. III begins with November, 1887. Subscriptions can begin at any time.

REMITTANCE OF MONEY.—All money should be sent by P. O. Order, Postal Note or Registered letter. In no case should money be sent by check, except on New York or this city.

Original Communications, reports of cases and local news of general medical interest are solicited. All communications should be accompanied by the name of the writer, not necessarily for publication.

All letters and communications should be addressed to the CLEVELAND MEDICAL GAZETTE, No. 143 Euclid Avenue, CLEVELAND, OHIO.

Changes for advertisements must reach us not later than the second week of the month to be corrected in current number, addressed to W. N. GATES, Manager Advertising Department, 10 Public Square.

EDITED BY A. R. BAKER AND S. W. KELLEY.

EDITORIAL.

PHYSIOLOGY AND HYGIENE IN THE PUBLIC SCHOOLS AS TAUGHT IN THE SO-CALLED TEMPERANCE TEXT-BOOKS.

THE editor of the *Medical Record* says, in discussing this subject, that some communities have already experienced the first fruits of this new system of instruction. These results are somewhat curious. It is found that the incidental facts designed only to lead up to the one great moral are more prominent in the pupils' minds than the moral itself. The various charts which portray stomachs, livers, and other viscera diseased from alcohol are regarded much in the light of picture-books on a large scale. They produce no more impression on a child's mind than the sight of a tattooed man, or some "freak" of a dime museum.

It is right that the question of temperance should be brought down to the scope of a child's ideas, right from a medical stand-point as well as from a moral one. But it is hardly the judicious course to teach him to regard alcohol as a deadly poison under every circumstance. He will be disillusioned as he grows older and will look back to his text-book teaching as a mass of overstated facts. The trouble with many of the text-books on temperance used in schools is that they are not physiologically correct. They are written by persons with more zeal than accurate knowledge, and consequently we have sometimes ludicrous statements from pupils. The description of the distillation of alcohol strikes the child as a very interesting thing, and so the fact designed to be taught—its pernicious effects—fails to make a lasting impression.

As an example of the teachings of the text-books, we cannot refrain from making a few quotations from a little book entitled 'One Thousand and One Questions and Answers on Physiology and Hygiene,' by B. A. Hathaway. It is almost as interesting reading to the physician as "English as she is spoke" is to the general reader.

Under the head of "Special Senses" we are told "they are the outlets of the soul." We also learn that the eye is made up of three membranes and *three humors*. "Tobacco produces dilatation of the pupils." Under the head of "The Physiological Effects of Alcohol and Narcotics" we are told that alcohol when taken "in the stomach is a deadly poison;" that "it is carried directly from the stomach to the liver by the portal vein;" that "it changes the color of the bile from yellow to green, or even black;" that "alcohol is incapable of forming any part of the body;" "it is never digested and converted into nourishment;" "half the cases of insanity are due to this curse." These statements are taken at random from the book and show the dogmatic manner in which facts, at least not proven, are stated. This book is a sample of the better class of text-books that are placed in the hands of our pupils in the public schools. It might be well at this time, while there is a bill pending before the Ohio state leg-

islature making provisions for temperance instruction in the public schools of the state, to emphasize the necessity of furnishing text-books such as will not mislead the pupils on this subject.

We are aware that this is a difficult one to discuss unbiased, yet we cannot afford, in our zeal to further the cause of temperance, to teach our children things which they will soon learn to be untrue. Cannot some physician furnish us with a text-book upon this subject that will forcibly inculcate the physical and moral necessity of leading temperate lives without making the ludicrous blunders and erroneous statements found in the works now published on this subject?

MEDICAL LEGISLATION.

WE learn that another bill to regulate the practice of medicine in Ohio is to come before the legislature again this winter. The title of the proposed bill is "A bill to provide for the registration of all practitioners of medicine and surgery in the state of Ohio, and the organization of the College of Physicians and Surgeons of Ohio, and to define the duties of the medical colleges of the state."

Sections 1, 2, 3 and 4 provide for the registration of physicians now in practice. The language employed is practically that of the Pennsylvania law, which has been found to act so well.

Section 5 provides that any person who may hereafter desire to commence the practice of medicine in the state of Ohio "shall lay his diploma before the faculty of the College of Physicians and Surgeons of Ohio"—a purely examining body created by the act—upon whose indorsement the diploma may be registered. The further provisions are as follows:

SECTION 6. The practitioners, registered as provided for in Sections 1, 2, 3, 4 and 5, shall constitute the College of Physicians and Surgeons of the state of Ohio, invested with ordinary corporate powers, and shall meet annually in general session to consider such questions as may pertain to the

interests of the profession and the welfare of society. The business of the college shall be managed by the board of trustees as hereinafter provided.

SEC. 7. The registered practitioners shall meet in their respective counties at the court-house, or the usual place for the meeting of the county medical society, on the second Saturday after the expiration of the time for completing the registration, and organize by electing a president and such other officers as they may deem necessary, who shall hold their offices until their successors are duly elected and qualified; and the presidents of the county organizations shall constitute and be known as the trustees of the College of Physicians and Surgeons of Ohio. Each county organization may, in the name of the College of Physicians and Surgeons of Ohio, sue and be sued, plead and be impleaded; but such organization shall not involve any other organization in litigation or subject the same to financial loss, and each and every county organization shall discipline its members for gross unprofessional conduct and expel those who may be convicted of using the knowledge or skill of the medical profession in the commission of crime, and direct the county clerk to remove their names from the county medical register; but the accused shall have the right to appeal first to the trustees of the college and afterward to the courts for redress. And the county organizations shall do and perform such other duties as may be required of them by this act, or the rules and regulations of the trustees as provided for in Section 8 of this act.

SEC. 8. The trustees of the College of Physicians and Surgeons of Ohio shall, thirty days after their election, meet in the capitol of the state and organize by electing a president, secretary, treasurer and such other officers as they may deem necessary, who shall hold their offices for one year and until their successors are elected, and the president shall be the executive officer of the college. In their corporate capacity they may establish additional county organizations in counties having more than one hundred and fifty registered practitioners, and in such capacity they shall receive and act

upon all resolutions, appeals and other communications from county organizations; make rules and regulations for the government of the college, which shall be in force and binding on all registered practitioners on and after their adoption by a majority of the county organizations; appoint a faculty of which the president, secretary and treasurer of the college shall be members and officers; provide and use a seal, and annually publish the proceedings of the college, including a correct list of the registered practitioners of the state as reported to the county organizations by the county clerk, of which each registered practitioner shall be entitled to a copy sent to his address.

SEC. 9. The faculty of the College of Physicians and Surgeons of Ohio shall annually meet on the call of the president of the college, at such time and place as he may name, to inspect the diplomas and pass upon the qualification of all persons who may appear before them, as directed in Section 5 of this act. The president of the college, when the faculty is not in session, or the president of each of the county organizations, may direct the county clerk to register persons whose diplomas have not been inspected by the faculty, but such registration shall be void after the next annual meeting thereafter, unless approved by the faculty. The faculty of the college shall serve without compensation, but the trustees shall provide for their reasonable expenses during their annual meeting, to be paid out of admission fees, and the president of the college shall receive such reasonable compensation as the trustees may direct for his services as executive officer of the college, to be paid out of funds arising from admission fees. And the trustees of the college shall serve without compensation, but their respective county organizations may provide for their reasonable expenses during the annual session.

This bill is a good one, and we would be pleased to see it enacted, but we fear that it will meet the same fate as every previous effort in this direction. The trouble with all our attempts to secure better laws regulating the practice of medicine in Ohio has been that we have asked too

much. If we cannot get a whole loaf, why not take a half? We could get a simple registration law, such as they have in Pennsylvania, if we asked for it and did not tack on a number of sections which we know from past experience will result in a defeat of the whole bill.

Dr. Jones' article, read before the last meeting of the State Medical Society, and published in a recent number of the GAZETTE, showed conclusively that if we had a good registration law that, with the laws we now have in force, we would be in a pretty fair condition with regard to medical legislation.

THE AMERICAN MEDICAL ASSOCIATION.

THE *Cincinnati Lancet and Clinic* says: "The local committee of arrangements for the meeting in that city, May 8, are actively at work, having secured Music Hall and ten contiguous rooms for the meetings, and reduced railroad rates for visitors. New and novel entertainments for the delegates are being arranged for, while the scientific factors of the meeting are receiving such special attention as to give promise of being the most profitable and useful meeting the association has ever had. We earnestly desire our readers to not only get ready to come, but to tell your professional neighbors to come. See that your medical society sends a full delegation, and in order that the delegation may be as large as possible, induce every regular physician in your county to become members of the county society. In this way show your active personal interest in your profession, and you can help give the old association a boom. Cliques and personal jealousies are at a discount in our city, and rarely, indeed, is such a thing heard of, except as in existence in days of yore. As we are living in unity, our local societies are large, the meetings active, and a millennial state of things exists that bodes good and only good for the next meeting of the American Medical Association. We want you to bring your wives and sisters. The entertainments that are being provided for them we hope will ever be re-

membered as an oasis in the history of your family. It is a little more than three months until the meeting; focus all your arrangements to that time, and then for a week let up on your patients, give them a chance, and let the occasion smooth out some of the wrinkles that are wont to increase with your years and cares. We expect you to be here and ready for duty, and be sure to bring your wife, that her joys may be added to yours with the occasion."

CUYAHOGA FALLS, OHIO, January 21, 1888.

To the Editors of CLEVELAND MEDICAL GAZETTE:

Gents: If you are going to continue the practice of *inter-leaving* the general reading matter of the GAZETTE with patent medicine ads., as in the last number, you can send my bill to date, and rub my name off your list of subscribers. I do not like the style. Very truly yours, G. C. UPSON.

We can assure the doctor that he does not regret the appearance as much as we do the necessity of *inter-leaving* the reading matter of the GAZETTE with "patent medicine ads." And if the medical profession supported legitimate medical journals as they ought to do, we would not have been obliged to make this concession. It is a humiliating confession that the average doctor will prefer to receive his periodical medical literature in the form of a "patent medicine ad." for nothing rather than pay for it in a legitimate journal. We tried for two years to run a journal without "inter-leaving the general reading matter," and lost hundreds of dollars in the undertaking. When it came to a question of increasing the price of the journal to two dollars, or of increasing our advertising patronage, our readers, so far as we were able to learn, preferred to have us increase our advertising. We will, however, assure Dr. Upson that we have not sold out to the patent medicine men, and will not admit anything in our advertising pages which we do not know to be legitimate remedies or appliances, prepared by reliable firms, solely to be supplied to physicians or prescribed by them. But as we are obliged to depend largely upon the proprietary medicine firms to supply us with money

to publish the GAZETTE, we will be obliged to let them have some choice in the selection of the space occupied until such time as the receipts from subscriptions will enable us to do otherwise.

New Books and Pamphlets.

'The Surgical Treatment of Chronic Follicular Pharyngitis.' By R. Harvey Reed, Mansfield, Ohio.

'Carlsbad Mineral Waters and Sprudel Salz.' By A. L. A. Toboldt, M. D., editot *Medical Clippings*, etc., Philadelphia, Pennsylvania.

'Photographic Illustrations of Skin Diseases.' Second Series. Parts I. and II. By George Henry Fox, A. M., M. D. E. B. Treat, New York.

Third annual report of the North Texas Hopital for the Insane.

'Statistical Report of 5,700 Cases of Ear Diseases.' By S. S. Bishop, M. D., Chicago, Illinois.

'Treatment of Suppurative Otitis.' By S. S. Bishop, Chicago, Illinois.

'Operations for Mastoid Disease.' By S. S. Bishop, Chicago, Illinois.

'When and How to Use Mydnatics in the Eye.' By Edward Jackson, A. M., M. D., Philadelphia, Pennsylvania.

'Practical Examples in Prescription-Writing.' By Charles H. May, New York.

'Nasal Reflexes as a Cause of Diseases of the Eye.' By W. Cheatham, M. D., Louisville, Kentucky.

'Hints to My Pupils.' By Frank H. Tubbs, New York.

'Report of 261 Cases of Cataract Extraction.' By George Strowbridge, M. D., Philadelphia, Pennsylvania.

'Renal Colic, Parasitic and Calulus.' By J. B. Marvin, M. D., Louisville, Kentucky.

'Perostitis.' By N. Senn, M. D., Milwaukee, Wisconsin.

'Suppurative Inflammation of the Antrum.' By E. Flecher Ingals, A. M., M. D., Chicago, Illinois.

'Intubation of the Larynx.' By E. Flecher Ingals, Chicago, Illinois.

'The Radical Cure of Retro-Displacements of the Uterus and Inocentia by Alexander's Operation.' By J. H. Kellogg, Battle Creek, Michigan.

NOTES AND COMMENTS.

QUACK DOCTOR AND THE ILLINOIS STATE BOARD OF HEALTH.

Several months ago a certain doctor came to Chicago and commenced the practice of medicine. He advertised extensively the cure of a special class of diseases, when the State Board of Health interfered and revoked the doctor's certificate. He commenced an action against the state board in the circuit court. Judge Waterman decided the case and declared the act of the State Board of Health unconstitutional. He said: "The rights of a party charged with a punishable offense to notice of hearing is elementary, and one of the first rules necessary to the administration of justice. The defendant had a perfectly constitutional right to advertise in the newspapers and he cannot be deprived of it by any rule or regulation of the State Board of Health. This association, if its action was to be held legal in this case, could summarily try and punish, for an alleged offense, a brother practitioner without any notice whatever. Such a proceeding partakes of the nature of the star chamber, whose decrees led to a revolution and the death of a king of England on the scaffold. Such an institution as the State Board of

Health must not be tolerated to exercise such a power in a free country, and its acts must in this case be declared unconstitutional."

For Sale.—Practice averaging \$2,500 yearly, together with office building, furniture, medicines, etc., in a beautiful village fifty miles west of Cleveland. A good chance and good reasons given for selling. Address W., CLEVELAND MEDICAL GAZETTE, 143 Euclid avenue.

A copy of Lawson Tait's article on "Ruptured Tubal Pregnancy" was sent to us by Dr. W. J. Scott, with his comments thereupon. We have chosen to present our readers with the article, and Dr. Scott's views in the form of an original article rather than under the head of "Correspondence."

No impure or injurious article is used in the manufacture of the Atlantic & Pacific Tea Co.'s baking powder.

Pure cream of tartar and pure bicarbonate of soda are used in the manufacture of the Atlantic & Pacific Tea Co.'s baking powder.

There is no secret about the formula of the Atlantic & Pacific Tea Co.'s baking powder. Anyone can make it just as good as they; but the trouble is that many of the baking powders put on the market are compounded of an inferior quality of commercial chemicals.

Apropos to the subject of the sale of cigars by druggists, there is a venerable story, not recently told, of an old-time pharmacist who submitted to custom so far as to sell cigars, but would neither smoke himself nor allow smoking in his store. A customer who attempted to light the cigar he had just bought was informed of this rule of the establishment, and with considerable apparent surprise asked an explanation, since one who sold cigars must certainly expect them to be smoked! "Oh, yes!" the pharmacist answered, "we sell compound cathartic pills, too, but we don't permit their effects to take place in the store."

An Echo of Papa's Thoughts, Probably.—A little member of a Boston household has been greatly wrought up by the advent of a litter of kittens, and particularly exercised over the drowning of most of them. The question as to which should be permitted to live and which consigned to a watery grave had been long discussed, and the discussion had left an indelible impression on the little fellow's mind. Some days after, the family of which he is a member was augmented by the birth of triplets, and the little boy, on being first presented to the new-comers, startled everybody by the query: "Papa, how many is oo goin' to drown?"—*Boston Budget*.

Arsenic Cancer.—Mr. Jonathan Hutchinson, after referring to the fact that arsenic, when long used, may lead to the development of soft corns on the palms or soles, states that, in his belief, arsenic may also produce, or at least be an exciting cause of, epithelial cancer. Sir James Paget held the same view. This will be joyful news to our homœopathic brethren.

Twins, one Black and one White.—Dr. Newton Hill of Pickensville, Alabama, sends to the *Medical and Surgical Reporter* the report of the following case: "A black negro girl, about eighteen years of age, gave birth to twins at seven months, one of which was as black as the *ace of spades*, and the other as white as any white child I ever saw. This girl has been engaged as nurse in a white family a part of the year, but she has associated with both white and black. Both cords were attached to same placenta. Is this merely a freak of nature, or is it possible that they have different fathers? I would like to have the opinion of some of the brethren." A similar case is reported in Flint's 'Physiology,' and it is believed to illustrate the fact that there can be such a thing as superfecundation.—*Medical Record*.

The low price at which big sales of cocaine have been made in St. Louis of late aroused suspicion among the local druggists. An analysis was made and the cocaine found to be very greatly adulterated with pulverized borax.

A *medical association* has been formed in London, the members of which bind themselves to call into consultation only such consultation practitioners as are known to confine themselves to pure consultation practice.

Dr. J. C. Brown of Urbana, Ohio, died from apoplexy November 21, 1887, at the age of seventy-four years. He was a graduate of the Ohio Medical College, class of '45, and at the time of his death the oldest practicing physician in Urbana.

H. E. Stockbridge, Ph. D., professor of chemistry and consulting chemist to the imperial Japanese government, says that he is convinced that the "Carnrick's Food" is as perfect and efficacious in practice as its composition is correct in theory. It appears to me to be compounded on thoroughly scientific principles, and in this respect differs from most of the other articles placed on the market for similar uses.

The Society of Medical Sciences of Cleveland recently organized, speaks well for the growing professional interests of our city. "The objects of the society are: That we may have evening meetings, that a permanent place of meeting, owned by the society, may be secured, and that a medical library may be established, all for the medical interests of the city. To this end the admission fee has been placed at twenty-five dollars, and the annual dues at ten dollars, payable in advance." Meetings are to be held the third Monday of each month, at 8 p. m. The society was organized with Dr. H. K. Cushing as president and Dr. B. L. Millikin as secretary.

The objection raised against the formation of a new society by some members of the profession, viz: that it would be detrimental to the interests of the Cuyahoga County society, from present indications, does not seem to be well founded as the attendance during the past few months has been larger and more interest manifested than for some time. Cities of less size than Cleveland support several medical societies, and we can see no reason why Cleveland cannot do likewise.

The regular course of lectures at the Medical department of the Wooster University will open on Thursday, March 1.

At the last meeting of the Society of Medical Sciences, Dr. E. Cushing and Dr. Maynard were elected honorary members.

Examinations commence in the Medical department of the Western Reserve University on February 29. Commencement occurs March 9, and the annual meeting of the Alumni association will be held at 2 P. M. on commencement day.

[*We* are always pleased to hear from graduates of the old Cleveland Medical College, as well as from graduates of all the Cleveland medical schools who have not forgotten their *alma mater* and who are not proving drones in the profession. —EDS.]

VAN BUREN, ARKANSAS, JAN. 10, 1887.

DEAR DOCTORS: Enclosed find one dollar for year's subscription to the GAZETTE. I like it much, as it is like to seeing an old friend every month, in that it recalls Cleveland with my classmates of the days gone by, and the faculty of honest instructors of the Cleveland Medical College, to whose presentation of medical truth without coloring I owe anything that I am in the professional hive. Partly to show you that I am not altogether a drone, I send you our 'State Transactions,' which has an account of a surgical curiosity from a case in my practice; but further I wish to call your attention to the address of the retiring president, Dr. J. A. Dibrell, sr., with whom I have been associated in practice for four years or more.

He wishes me to say that he is indebted to Mr. Williamson for the terse sentences included in the quotation marks. You will recognize the passages as being parts of an address published in the GAZETTE some months ago. In a footnote the source was mentioned, but the printer failed to get it in the form.

Yours kindly,

GEORGE F. HYNES.

Dr. A. B. Carpenter, in his report of "Progress in Gynæcology," read before the Cuyahoga County (Ohio) Medical Society, January 5, and published in this number of the GAZETTE, under the head of "Treatment of Fibroid Tumors of the Uterus," stated that he should have in use in a short time an apparatus for the supplying of the continuous galvanic current for the treatment of these cases. It gives us pleasure to state that Dr. Carpenter has completed his apparatus, and we have seen it tested, and it acts admirably.

His device consists in utilizing the electric current from a street wire of the incandescent lighting system. He has had connections made in his office with the Edison incandescent circuit, and by means of an ingeniously constructed rheostat the current is reduced so as to be scarcely perceptible. By the means of a delicate instrument the current is accurately measured while passing through the patient's body. A switch-board is made use of, whereby the current can be increased from a fraction of a milliamperere to the highest tolerant dosage. The apparatus is absolutely safe, as the entire voltage of the wire can be handled with impunity. Every physician who has had occasion to use electricity generated in jar cells has experienced the difficulty of keeping his battery in working order. The treatment of fibroid tumors of the uterus under the Apostoli plan has greatly increased these difficulties. Martin of Chicago has devised a miniature dynamo, with special reference to supplanting the cell battery, for this work, and designed to be run by an electric motor. The simplicity and cleanliness of Dr. Carpenter's device, we think, should entitle it to careful consideration at the hands of the profession.

We are revising our mailing list, and if any mistakes are made we hope our subscribers will notify us at once.

Antipyrine in puerperal conditions as well as inflammatory troubles of the pelvis, seems to be steadily growing in favor. Given in from five to ten grain doses every three hours, it reduces temperature, controls pain and quiets the restlessness, and is a valuable internal antiseptic. It should be given

with caution and the effects of the drug carefully watched, as it sometimes produces a dycrotic pulse. It is specially valuable in cases of early abortions, where the expectant plan as regard the removal of the deciduæ is being practiced.

The Nose the Source of All Our Woes.—At the last Congress of German Naturalists and Physicians, held in Wiesbaden, Dr. Gacy reported several cases of mental disturbance characterized by an impossibility of fixing the attention on any subject, except for a very brief period, or of prolonged mental effort of any kind whatever. This condition, to which the author gave the name of aproxia, was always associated with certain lesions of the nasal mucous membrane and obstruction to the passage of air through the nasal fossæ. This is, we believe, the latest accusation which has been brought against the sinful nose. Headache, cough, dyspnœa, earache, neuralgia, hay fever, acne, convulsions and syncope are only a few of the many evils which this troublesome organ is accused of having inflicted upon long-suffering man, and it bids fair to outstrip even the ovaries as a centre for morbid reflexes. As regards aproxia, however, it is said not to be a reflex, and the mechanism of its production is assumed to be a purely physical one. The lymphatic spaces beneath the dura mater have been found to be in direct communication with the mucous membrane of the nasal fossæ, and inflammation of the latter is supposed to interfere with the elimination of the waste products resulting from cerebral activity, thus leading to mental sluggishness. But whatever may be its methods, the nasal organ is evidently responsible for many, if not most, of our ills. Clearly, the nose must go.—*Medical Record.*

In Honor of the Lady.—A short time ago a lady in Mexico, the first of her sex in that country to attain to such a dignity, was graduated in medicine. In order fittingly to celebrate the great event, her fellow-students in the medical school organized an amateur bull-fight in her honor.—*Medical Record.*

A *Homœopathic* doctor, addressing a graduating class of nurses the other day, said: "Some trained nurses are trained nuisances. The tongue is the most dangerous thing provided you by nature. Learn to keep your mouth shut." Good advice for other than homœopathic nurses.—*Boston Medical Journal.*

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ORIGINAL ARTICLES.

BRACHIAL PARALYSES.*

BY HENRY S. UPSON, M. D., CLEVELAND, O.

WITH the permission of the Society, I wish to give a brief account of brachial paralyses, in connection with a case of paralysis of some of the muscles of the forearm.

The patient, Mrs. Keefe, came to me December 5, 1887, complaining of a loss of power in the right wrist and hand. Her history, taken at the time, is as follows:

Patient has been in general healthy. In 1880 she began to have attacks beginning with numbness and tickling in the right hand; these ran up the arm to the face, the lower lip twitched, but head and arm did not move. The tongue became thick, patient got words mixed, was sometimes unable to speak a word. There was then great pain in frontal and occipital regions, she felt nervous, occasionally vomited. Patient always knew attack was coming on by seeing lights before the eyes in spots. Occasionally had hemianopsia. Attacks came every month or so. She has had none since last February. At time of her mother's death she had hal-

* Read before the Cuyahoga County Medical Society.

lucinations in the night, thought she saw fairies and sisters of charity, but knew at the time that these were delusions. Has had some crying spells, and sometimes feeling of lump in the throat.

Last July, five or six months ago, she began to lose power in her right wrist, and this has been getting worse ever since. No tinglings, but some soreness in wrist, which came on after the paralysis.

Status Praesens—Complete paralysis of right extensor communis digitorum, extensor carpi radialis longior and brevior, and extensors of the thumb and little finger. Supinator longus acts well. No anæsthesia. No other paralyses. Sight good. Fundus oculi normal. Pupils equal and react well. Knee jerk normal.

Patient has had no colic nor constipation. No specific history; patient has never used hair dye nor face powder. Has been in habit of drinking six or eight cups of coffee a day; no alcohol. Has no lead line on gums, takes good care of her teeth. Urine contains no albumen and no casts.

Our first problem is to determine whether the disease is organic or functional; if organic, whether the lesion is situated in the brain, spinal cord, or peripheral nerves.

In looking over the history we are struck at once with the similarity of the sensory attacks described by the patient, with those which occur in Jacksonian epilepsy, which is caused by disease in the cortex of the brain. In these attacks, first described by Hughlings Jackson, the convulsion usually begins in one of the extremities, 'say the hand, it may be that one of the fingers begins to move, the tremor is communicated to the others, then crawls up the arm, the face begins to twitch, and the patient then usually loses consciousness. The convulsion may become general or remain unilateral. In like manner a sensory aura may begin in one hand and creep up the arm, and this seems to be the fact in the case under discussion. Convulsive movements, however, have been nearly or quite absent, but the patient gives a fairly clear account of aphasia immediately afterwards, which

is especially interesting, as the symptoms exactly follow the positions of the arm, face and speech centres in the cortex. The nerve storm here began in the arm centre, passed through the face centre to the tongue centre, which is located, by most authorities, then to Broca's motor speech centre. Is this a paralysis of cortical origin, due to disease of the arm centre, and to be brought into connection with the sensory symptoms just described? To determine this it is necessary to make an electrical examination, and find or exclude the reaction of degeneration.

It is found that when a nerve is cut through, a degeneration of its fibres takes place below the point of injury, and at the same time there is an organic change in the muscles which it supplies. The same thing occurs from destruction of the large motor ganglion cells in the anterior horns of the gray matter of the cord. This change causes a difference in the electrical reactions of the muscles, called the reaction of degeneration.

A normal muscle reacts to both the Faradic and galvanic current with a sharp contraction, and the contraction on cathodal closure is greater than the contraction on anodal closure. The degenerated muscle does not react to the Faradic current; its contraction on galvanization is sluggish; the contraction on cathodal closure is usually weaker than that on anodal closure. These differences are shown in this table, and it is necessary to bear them in mind.

When motor fibres are cut across in the brain or lateral columns of the cord, the descending degeneration stops at the ganglion cells in the cord; these are not involved, and the muscles give no reaction of degeneration.

Examination in this case revealed the fact that the paralyzed muscles do not respond at all to the Faradic current; their galvanic excitability is markedly decreased; to the galvanic current their contraction is sluggish and very characteristic. Cathodal closure contraction is slightly greater than anodal closure contraction. That is, although the galvanic formula is not reversed, there is unmistakable reaction of degeneration.

We are therefore certain of an organic cause, which is not cerebral, but situated either in the cervical cord or in the musculo-spiral nerve.

The sensory attacks described above have no connection with the paralysis, but were probably auræ of migraine which regularly followed them.

The diseases which occur in the cervical cord are the following:

Acute polio-myelitis, or ordinary infantile paralysis. This is an inflammatory process involving the anterior horns of gray matter. It causes atrophy and reaction of degeneration, and usually runs its course without sensory symptoms. The disease may be ushered in with constitutional symptoms—chill, fever, convulsions, headache, delirium—but these subside within a week, and the paralysis then remains stationary or improves slowly. Excluded here, as this is a process which is decidedly progressive.

Progressive muscular atrophy is a chronic disease which causes paralysis with reaction of degeneration. It is due to a probably primary degeneration of the large motor ganglion cells of the cord. There are no sensory symptoms. It is here exceedingly improbable, because in it the small muscles of the hand are regularly the first ones affected, the atrophy showing itself in the dorsal interossei. Both hands are apt to be affected at about the same time.

Amyotrophic lateral sclerosis regularly begins in the cervical cord, and consists in a chronic degenerative change in the anterior horns of gray matter and in the pyramidal tracts. The first symptoms are stiffness of the muscles and increased tendon reflexes, weakness and fibrillar twitchings—a very different clinical picture from the one presented by this patient.

The hypertrophic form of pachymeningitis occurring in the cervical region of the cord, was first described by Charcot. It eventually leads to paralysis from pressure on the motor tracts; but this is preceded by local pain and tenderness, a prominent symptom also in affections of the meninges of the brain, and by paræsthesiæ and anæsthesiæ from interference

with the sensory posterior nerve roots. None of these symptoms are present.

Syringo-myelia regularly begins in the cervical cord and consists in the formation of a cavity around the central canal, from the breaking down of a new formation much like a glioma. Sensory symptoms are prominent, there being patches of anæsthesia, especially to heat and cold.

Tumors and abscesses of the cord cause by pressure sensory symptoms, and are apt to cause also a spastic condition such as is found in lateral sclerosis.

There remains the chronic form of polio-myelitis anterior. This is a progressive affection, without sensory symptoms, and gives rise to paralysis with atrophy and the reaction of degeneration. It usually begins in the lower extremities, and constitutes one form of the so-called ascending paralysis. It is theoretically possible that the paralysis in this patient is caused by such an inflammatory process, but the localization is not a typical one, and there is a form of peripheral disease which better explains the symptoms, as we shall see later.

Among the peripheral nerves the musculo-spiral is very often diseased, usually as a result of injury or the selective action of poisons. Traumatic paralysis may be caused by the pressure of a crutch in the axilla, in which case the triceps is paralyzed as well as the supinator longus and extensors; by pressure from the patient leaning on his arm when he is asleep, when the injury usually occurs half-way down the arm, between the triceps and biceps, and the triceps is usually spared; by a blow or cut. In all these cases the sensory as well as the motor filaments of the nerve are affected, and there is anæsthesia of the integument supplied by the radial, *i. e.*, the back of the radial side of the hand, of the thumb, and of the first two fingers as far as the second phalanges. In our patient this is not the case, and, furthermore, she gives absolutely no history of injury.

Multiple neuritis is a disease which has attracted much attention of late. It is an inflammation occurring along nerve trunks, and causes paralysis with atrophy. But the paralyses are irregularly distributed, and sensory symptoms

are always present and are apt to predominate. The same may be said of paralysis resulting from pressure on a nerve by tumor or aneurism, and of the variety caused by the so-called rheumatic neuritis.

There remain the paralyzes of toxic origin, and of these, that caused by lead is the most frequent. This is an affection which begins insidiously with weakness in the extensor communis digitorum muscle, and the neighboring extensors soon become involved. There is, then, as in this case, atrophy with the reaction of degeneration, very rarely pain, tingling or anæsthesia. There is another peculiarity of lead palsy which is much relied on to distinguish it from that due to injury of the nerve, namely, the exemption of the supinators. The supinator brevis is not accessible. In order to see whether the supinator longus is paralyzed or not, it is simply necessary to cause the patient to flex the forearm on the arm, with the hand in the position of pronation. *Thus.* You see at once that this patient's supinator longus acts well.

For both these reasons we exclude nerve injury and ordinary forms of neuritis. But we have already excluded functional and cerebral troubles, and all spinal diseases except one, namely, chronic polio-myelitis anterior. But that affection, as pointed out, is very rare; it usually begins in the lower extremities; it may affect a group of muscles which habitually act together, but rarely, if ever, an isolated group of muscles supplied by one nerve. It is a much less violent supposition to consider this paralysis as toxic, due to the ingestion of lead.

Inquiry has as yet failed to find out the source of the poison. A visit to the home of the patient brought out the fact that she has used tin and granite-ware coffee and tea-pots, some of which, she stated, turned the coffee black. Chemical tests applied to these in a way suggested by Professor Morley, have failed to show any lead in their composition, and in the absence of other testimony we must consider, either that there has been sufficient lead to cause poisoning in the drinking water, which patient states comes through a lead pipe, or that the cause is one which has

evaded our observation, but which we may later bring to light. In regard to poisoning from lead pipes, there are a few observations of this kind on record, although they are rare. The patient states that she has not been in the habit of letting the water run for a time before using it, but she has now been instructed to do so.

No examination of the urine for lead has been made, owing to the inconveniences which attach to a sulphuretted hydrogen apparatus.

The absence of the lead line on the gums is the rule with patients who are in the habit of brushing their teeth.

Although it is the rule for both arms to be affected, cases are not rare in which both legs, or one arm alone, or an arm and a leg suffer. Buzzard records a case in which the right arm and left leg were the only seats of paralysis, and from this curious arrangement the diagnosis of hysteria had been made. Electrical examination showed the presence of the reaction of degeneration in the affected muscles. The same patient had no lead line and no colic.

The pathology of lead paralysis is still a moot point. All observers are agreed that there is an organic lesion, and that the muscle fibres undergo atrophy in the same way that they do after section of a nerve. The muscle fibres become smaller in calibre, there is increase in the number of nuclei, in fat and in connective tissue.

Changes in the spinal cord have been found by some observers. The latest researches are those of Schultze of Heidelberg. He found in a number of cases the spinal cord healthy, the musculo-spiral nerve the seat of a well-marked inflammation. How and why the inflammatory process attacks only the motor fibres is unexplained, as is the selective action of the poison in affecting only the radial nerve. This fact has its analogue in neuralgia, especially that affecting the sciatic nerve, caused by a neuritis which affects only the sensory filaments.

The treatment which has been followed in this case is the one familiar to you all. Potassium iodide has been given internally to hasten the elimination of the poison; the affected

muscles have been treated twice a week with the interrupted galvanic current. Slight improvement has been noticed in the motility of the thumb and little finger, and the muscles seem to respond to the current a little better than at first.

The prognosis was a cautious one on account of the decided lowering of galvanic excitability and the long-standing of the complaint. We may tell a patient who presents so marked a case of the reaction of degeneration, that the affair will be one of months, and that a complete recovery is doubtful.

DISCUSSION.

Dr. Bennett said that he had observed an interesting peripheral nerve affection on himself. Some months ago he noticed a weakness in the muscles supplied by the ulnar nerve on the right side. He noticed a difficulty in writing for any length of time. There have been tingling sensations and anæsthesia over a corresponding area, but rather more, he thought, in the deeper structures than in the integument. He was disposed to attribute the difficulty to a slight neuritis of rheumatic origin. All these symptoms are improving.

Dr. Vance had been in the habit of considering lead paralysis as a bilateral affection. He had listened attentively to the description of the case, and it had made on him rather the impression of an injury of some sort to the musculo-spiral nerve.

Dr. Upson, in closing the discussion, wished especially to emphasize the fact that there had been in this case no history of injury of any sort, no anæsthesia, and that the supinator longus is not involved.

VESICO-VAGINAL FISTULA.

BY REUBEN A. VANCE, M. D., CLEVELAND, OHIO.

THERE are no accidents connected with parturition more distressing in their immediate results or more destructive to the health and happiness of the victims than vesico-vaginal fistulæ. In constant misery from the unchecked flow of urine, with ulceration and abscesses undermining their physical stamina, their bodily sufferings are almost beyond endurance; yet these are slight afflictions contrasted with the shipwreck of family and social life attendant upon lesions of this character. Disgusting to themselves and offensive to those about them, these unfortunate sufferers, when not relieved by surgical interference, can look to death only for escape from their miserable lot.

In order to understand the nature of these lesions their causes must be glanced at. And here, as but too frequently is the case elsewhere in practical medicine, bad logic and worse reason have been employed in explanation of the etiology of vesico-vaginal fistula. The history of some of these cases can frequently be summed up in the statement that the given patient was long in labor, that counsel was summoned, instruments employed, and ten days or a fortnight subsequently incontinence of urine manifested itself, an examination revealing an opening between vagina and bladder. In the popular mind the connection between the instrumental aid afforded and the subsequent fistula is clear and unmistakable; fortunate indeed is the operator if he has no reason to suspect that the practitioner to whose call he responded and whose patient he relieved has not directly or indirectly given his professional sanction to the popular view. Again, the use of instruments is immediately followed by escape of urine—in this case there can be but little doubt as to the agency of the former in the production of the fistula. Finally, in exceptional cases, fistulæ occur after non-instrumental labors, although the latter may not have been very difficult or much prolonged. In explaining these various cases it must be borne

in mind that there are three distinct forms of vesico-vaginal fistulæ. In one a slough, due to pressure and consequent interruption of circulation, is the cause; occasionally the forceps by lacerating or dislodging a softened mass of necrosed tissues and opening an avenue for the immediate discharge of urine may seemingly obscure the etiology of a given case, but a little attention will render the matter clear. In others the instruments, by mischance, negligence or unskillfulness, penetrate the septum and open the bladder. These are as clearly due to traumatism as the former are to long continued pressure. In the third class of cases—fortunately of rare occurrence—ulceration of uncertain origin attacks the tissues between bladder and vagina, and a fistula forms.

There is a practical distinction of vast importance between these various fistulæ. Broadly it can thus be stated: An opening between bladder and vagina due to loss of tissue from sloughs or ulceration has little tendency to close—if much tissue has been destroyed it is never united by the unaided efforts of nature; in traumatic fistulæ, on the contrary, the tendency is towards recovery, and in the vast majority of cases the opening is healed spontaneously. When, therefore, the bladder is perforated by the forceps or other obstetrical appliance, unless pressure or disease shall have already impaired the vitality of the tissues so that the opening is made through what will in time be a slough, bad as the immediate symptoms may prove and distressing as the patient's state may be for a time, yet the prognosis is so good that the fears of the friends may be allayed and a cure by the unaided efforts of nature safely promised.

It's a trite saying that no two grains of sand are alike; it's certainly true that no two cases of vesico-vaginal fistulæ have more than a superficial resemblance. With a restricted area in which to locate themselves, classifications on paper must necessarily arrange these lesions under similar headings. Consequently an artificial similarity founded on names is formed that may prove misleading. Fistulæ alike in size and situation are found to have no essential similarity when it comes to treatment. The experienced operator looks to

other things than location and extent when striving to form an opinion as to the curability of a given case. And these are the complications due to varying amounts of destruction of tissue effected by the agency that originally produced the opening between the genital passages and the vesical cavity—complications that at the time the patient presents herself to the operating surgeon have resolved themselves into bands of cicatricial contraction. The slough that penetrates the septum at a single spot may branch and ramify in a dozen directions without destroying the whole thickness of the wall; numerous necrosed masses may be dislodged at various points that implicate only the surface. Yet wherever the tissue is injured there a cicatricial band will subsequently be located about which but one thing can certainly be foretold—that is, that it is sure to contract. Where the septum has been penetrated there at first will be an irregular opening; under the reparative process this will contract and grow smaller until a point is reached where the agencies that would render the opening smaller are just balanced by the contractile qualities of the radii of cicatricial material that center in the fistula; then a struggle ensues in which the previously circular character of the fistula alters under the traction to which it is subjected, and both bladder and vaginal cavities become strongly changed by the new forces thus brought into action. But other agencies than those alluded to speedily come into play. The bladder, no longer susceptible of distention, is the subject of fatty substitution in its muscular wall. The vagina, distorted and contracted by scar tissue, is constantly irritated by the decomposing urine that pours through it. Sabulous material deposits itself on every breach of surface, and unless speedily removed ulceration ensues beneath it and abscesses develop in contiguous parts. As the natural tissues are thus undermined and destroyed, cicatricial material takes their place; the distortion of the vagina increases, its calibre diminishes, the bladder grows smaller, the fistula seems fixed to one or other ramus of the pubes, and the surgeon to whom the case is presented in this stage finds all natural boundaries obscured, and it is

a work of weeks to obtain a view of the edges of the fistula through the wreck of pelvic structures.

The first step in any effort to relieve these patients must be towards establishing a natural condition of the vagina. The sabulous material must be removed, the excoriations treated, the ulcerations and abscesses cured. The contracted vaginal walls must be stretched and projecting contractions cut. Pressure will remove induration and appropriate medication check the tendency to renewed deposits. These matters, however, are best portrayed in connection with cases actually treated.

Some curious reflections might be made on the history of the operation for vesico-vaginal fistula, for the steps whereby a procedure but a few years since confessedly the most difficult and uncertain in surgery has become safe, sure and reasonably easy, cannot be otherwise than interesting. In this country four names demand consideration—Hayward, Mettauer, Sims and Bozeman. Hayward of Boston directed ordinary surgical methods to the cure of these fistulæ, forcibly brought the lesion into view by a whalebone bougie introduced through the urethra, dilated the vaginal outlet, pared the edges of the fistula, united them with interrupted silk suture and used a special catheter to keep the bladder empty during recovery. Mettauer of Virginia employed metallic sutures. Marion Sims of Alabama invented a speculum that enabled him to operate with the patient prone and the fistula in normal relation with adjoining parts. Nathan Bozeman, also of Alabama, introduced the button suture, the speculum known by his name, and a chair which enables the operator to avail himself of the right angle position for his patient. He also systematized a preparatory treatment that rendered ordinary cases more readily curable and brought into the domain of possible cure many patients who otherwise would have been subjected to destructive operations as susceptible of relief in no other way. The name of Sims became a household word in both continents—Bozeman is known the world over for his success as an operator in these cases. Yet a little investigation shows

that long before the day of Sims and Bozeman, Wutzer of Bonn operated with his patients on their hands and knees, and used a perineal retractor to expose the fistulæ; while Gosset of London in 1834 placed his patient on her knees and elbows, and after exposing and trimming the edges of the opening, closed the fistula with metallic sutures and effected a cure after a single operation. Truly the words of Sydney Smith were never more appropriate than when applied to the originators of this procedure: "That man is not the first discoverer of any art who first says the thing, but he who says it so long and so loud and so clearly that he compels mankind to hear him—the man who is so deeply impressed with the importance of his discovery that he will take no denial, but, at the risk of fortune and fame, pushes through all opposition, determined it shall not perish for want of a fair trial."

Other investigators reaped valuable grain in this field. Jobert employed traction on the uterus and repeated incisions in the cicatrized vagina as a means of freeing adherent parts and apposing the rigid, widely-separated edges of fistulæ due to sloughing of the genital passages; while Simon, working on the old lines, showed that ordinary surgical devices sufficed for the cure of the vast majority of these patients. The career of the latter is extremely instructive. Without the position, the speculum, the suture, the catheter or the preparatory treatment of the American operators this wonderful German surgeon attained a success second only to that of Bozeman, and forever emphasized the too frequently forgotten fact that it is the skill of the surgeon that effects a cure, and not the elaborate devices of the mechanician or the peculiar character of the appliances employed.

The following cases illustrate many points of interest in this department of surgery. They will be detailed at sufficient length to render clear the necessity of the preparatory treatment, the peculiar nature of the given case and its special complications, the character of the operation performed and the reason for its selection. Subsequently some reflections will be appended upon the various procedures for the

cure of vesico-vaginal fistula soliciting surgical favor at the present time, and an endeavor made to estimate the value of each.

[*To be continued.*]

METHODS OF MEDICAL STUDY.

BY C. F. DUTTON, M. D., CLEVELAND, OHIO.

HAS not the time fully come when the attention of the medical profession should be called to methods of medical teaching? Are our present methods faulty? If so, is there "a more excellent way?" Let us consider a little. In all our colleges didactic lectures occupy the time for the most part. Clinics and quizzes are sandwiched in, but the published time schedules which fairly represent the plans pursued in all or nearly all the courses of study, show that lectures (so-called) are the sources from which the student is expected to acquire professional knowledge. On five and sometimes six days of the week he is required to listen to these from four to seven hours daily, with the exception of the few minutes allowed between lectures for change of teachers or lecture rooms. He is also expected to attend clinics, quiz classes, etc., as they may occur during the week. It does not become me to estimate the value of the lecture as ordinarily given, but may I not be permitted the query whether, as a general thing, all that is presented by the average medical teacher during the hour, which is of real value, might not in most cases, if properly condensed, be more efficiently said in fifteen minutes, leaving the remainder of the hour to be more profitably spent in some other way? I think you will agree with me in this—that if each lecture is pregnant with thought and rich in information, more mental pabulum will be furnished to the student than he can possibly appropriate or mentally digest. If it is *not* rich and instructive, to listen to it is a waste of precious time, and the student fails to receive his "*quid pro*

quo." In any case, will not the young man who has patiently sat during so many hours as the passive recipient of instruction find himself in the condition of Munchausen's horse, which, headed up stream, to the surprise of his rider, while drinking took in the whole stream, but continued to drink without any sign of stopping until his master, wondering how the beast disposed of so much water, looked behind him and found to his astonishment that the latter half of the animal had been cut off by the fall of a portcullis as he passed out of the city and the stream was simply running through him. So even the water he received did not satisfy him.

The comparison does not hold in this, viz., that the rills of knowledge which have sprung from these various sources do not collect into one stream or even run through his mental digestive apparatus, but, on the contrary, strike him at various angles and run off like water from a duck's back.

May I not query again whether a large part of the instruction as now given by lectures is not dry and uninteresting from want of definiteness, simplicity, clearness; and having been obtained largely from books by the lecturer, might it not be better learned from books by the competent student? The object of medical study is not so much to educate the mind as to acquire medical knowledge. The medical student is presumably well educated before he begins the study of his profession. If he is not, he ought to be, and no method should be adopted which makes special provision for the uncultivated mind. The habit of study and the ability to use books should be acquired by every candidate for the medical or any other profession before he is permitted to enter upon its special study. Again, is it good economy of time for first, second and third year students to attend the same lectures? If the lecture is adapted to the first year student, is it not A, B, C over again to the third year student? Or if it is adapted to the third year student, is it not for the most part beyond the first year student? Might not each, while he learns something by the common plan, be better taught and make more rapid progress by membership in a

class of his own grade? Why should medicine be taught in this miscellaneous way, while in all other departments of scientific instruction primary importance is attached to classification? May it not be proper also to enquire whether it is profitable for any student of whatever mental capacity to pursue so many branches of study at once? Those most familiar with teaching tell us that three solid studies are as many as can be pursued at once in other schools, and the courses of studies in our scientific and literary institutions everywhere are arranged on this plan. By what principle do we make medicine exceptional in this respect? Might not the professors in our medical colleges learn much to their profit by consulting more frequently those who have studied more specifically the principles and art of teaching? Our colleges are attempting, and in a measure succeeding, in elevating the standard of medical education, but so far as I am aware, this has been done more by multiplication of departments than by improved methods of instruction. More lectures are given now than formerly, where fewer might be better. The stuffing processes are the same now as ever. The student is seldom expected to *prepare* a lesson. He has no time. He often cannot know the topic even of the next hour. Nor has he time to review carefully a lecture after he has heard it. He frequently does not so much as own or have access to the books which treat of many subjects presented to him. His preparatory studies with his preceptor have, in most instances, been pursued also in a desultory way. Preceptors *precept* very little, and the facts are that medical students, as a rule, from the time they enter a preceptor's office until they are honored by their M. D. degree, have little opportunity to receive careful, methodical scientific teaching. Nor would the majority of them pass muster at all, if the same accuracy of knowledge was required of them in medicine and surgery at time of graduation that is required of students before they are allowed to graduate from other schools of learning. If these statements are untrue, I beg some better informed friend of the present system, or no system, of medical study to correct them. If they are true, ought there not to be wisdom sufficient to enable the fraternity to find a more excellent way?

The Cleveland Medical Gazette.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY

ONE DOLLAR PER ANNUM IN ADVANCE.

Vol. III begins with November, 1887. Subscriptions can begin at any time.

REMITTANCE OF MONEY.—All money should be sent by P. O. Order, Postal Note or Registered letter. In no case should money be sent by check, except on New York or this city.

Original Communications, reports of cases and local news of general medical interest are solicited. All communications should be accompanied by the name of the writer, not necessarily for publication.

All letters and communications should be addressed to the CLEVELAND MEDICAL GAZETTE, No. 143 Euclid Avenue, CLEVELAND, OHIO.

Changes for advertisements must reach us not later than the second week of the month to be corrected in current number, addressed to W. N. GATES, Manager Advertising Department, 10 Public Square.

EDITED BY A. R. BAKER AND S. W. KELLEY.

EDITORIAL.

THE CLOSING SESSION IN THE MEDICAL DEPARTMENT OF WESTERN RESERVE UNIVERSITY.

The winter's work at this school has gone steadily along until now the session is drawing to a close. This session has been distinguished from its numerous predecessors in several particulars. First, it was observed that the class assembled much more punctually at the opening of the session, the number having enrolled upon opening day being larger, and larger in proportion to the whole number who have attended this course, than was ever known before. Then again, in looking over the register one sees that the A. M.'s, M. D.'s, B. S.'s and A. B.'s are on the increase. Furthermore, alumni who have visited the school this winter were disappointed at not getting an opportunity to witness a cushion-throwing stampede, a free-for-all catch-as-catch-can wrestling match on the rostrum, or being enlivened by a harmonious

rendering of "John Brown's Body," "Saw My Leg Off," and other classical selections. They sighed in memory of the good old times, shook their heads ominously and feared that the jolly harem-scarum, grave-robbing, kidnapping, skylarking breed of "bone-pickers" was becoming almost extinct. Another noticeable feature has been the recitations instead of lectures, which fashion seems to be coming more and more into vogue each year, and is now employed at this school in all elementary branches. And lastly, now that the end of the term is drawing near, there is not so early a thinning of the ranks by the juniors dropping out before the close. More of the juniors are going to stay through the examinations and commencement exercises to "see how it's done," and more than ever before are going to take the spring course.

Examinations begin on Monday, February 27, and continue all the week. There are fifty-four candidates for graduation.

March 7 is commencement day. At two P. M. of that day will occur the meeting of the Alumni Association. An unusually large attendance of alumni is expected and the symptoms are strong for a meeting of uncommon interest. Dr. G. C. Ashmun is President this year, and will address the association. The orator of the day is Dr. W. A. Knowlton of Brecksville, and the poet, Dr. L. S. Ebright of Akron, and they will both doubtless acquit themselves with honor.

The subject for discussion is "Antiseptics in Midwifery," but we doubt very much whether anything profitable will be evolved under this order of business. Not that the members are not capable of handling any medical subject, but because the occasion is not suited nor the time sufficient for discussing a question of purely scientific interest. Members have felt and found this to be true, and we think it would greatly benefit the association to abolish the discussion and occupy the time instead in calling for representative men from each class in chronological order and listening to remarks and reminiscences from those who respond to the roll-call.

COMMENCEMENT EXERCISES

Proper will be in the evening, also at the college. The order of exercises will be—Prayer, an elaborate musical programme, an oration by Dr. T. Clarke Miller, the valedictory, and then President Hayden will present diplomas to the successful fifty-four? fifty-two? forty-seven? forty?—it would be an immense saving of nerve force to know now how many.

OHIO'S SANITARY CONVENTIONS.

Sanitary conventions have been held at Akron and Toledo during the last four weeks. That at Akron (January 25 and 26) was under the care of the State Board of Health, while the one at Toledo was the annual meeting of the Ohio State Sanitary Association. The topics presented and discussed were similar at both of these meetings and covered a wide range. The attendance was fair in numbers and character, but not large. Great interest was shown at both meetings in "School Hygiene," including physical, educational, moral and æsthetic elements, with papers presented and remarks upon them which were full of evidence that school life was regarded as most important. One of the best features of these conventions and similar gatherings is the contacts they bring about between all classes interested in such matters. Physicians, "health officers" and all others can here present questions and make statements of conditions which have a common interest and bearing upon individual and community life. At the Toledo meeting Professor Vaughn of Ann Arbor, Michigan, gave an interesting lecture on "Food Substances," not attempting to cover the whole field, of course, and avoiding technical terms as much as possible. A fair number of mechanics and other muscle-users were present and appeared very much interested in the food subject. The lecture certainly added to the information of all who heard it in one way or other. And the best outcome of such meetings is probably in the information and interest they impart.

QUACK ADVERTISEMENTS IN RELIGIOUS
NEWSPAPERS.

We have had occasion to call attention to this subject in a previous number of the-GAZETTE, and take pleasure in quoting the following editorial from a recent number of the *Medical and Surgical Reporter*, which we hope will result in correcting this abuse of the advertising pages of religious newspapers:

"From time to time medical men and medical journals have protested against the prostitution of the columns of religious newspapers to the use of advertisers of quack nostrums. This protest does not apply to temperately worded representations of what seems to have been accomplished by, or what may reasonably be expected of, a remedy or device for the cure of disease or injury. But it does apply to advertisements couched in language which bears the stamp of falsehood on its face, or which is of such a character as to arouse suspicion in the mind of an intelligent man, uninfluenced by a money consideration.

"The editors of most religious journals are, as a rule, men of so much intelligence that they will hardly attribute to trade-jealousy alone the objection which medical men have to the recommendation of 'sure cures' for baldness, fits, rupture, consumption, and so on, to persons who are apt to regard their religious teachers as safe guides in matters of health or disease; and who are not sufficiently familiar with the subtleties of the newspaper business to distinguish between the responsibilities of the editor and those of the publisher. As a fact, most readers of periodicals have the impression that the advertisements they contain are endorsed by the editor. Advertisers rely upon this fact; and we cannot understand the casuistry which satisfies the conscience of a man who edits a periodical, ostensibly devoted to religion, which replenishes its coffers with the price of palpable falsehoods.

"If it were true that a religious paper could not be financially successful without taking money for the advertisement of worthless or delusive remedies, a course might be suggested worthy of the main object of these papers. But it is not true, for there are a few happy illustrations of the fact that, even in a religious newspaper, 'honesty is the best policy.'

"We call the attention of our large circle of readers to this matter, in the hope that they will use their influence to

put an end to what we regard as a serious blemish in religious newspapers, and one which injures the good reputation which they ought to enjoy. And we call the attention of those religious newspapers to which our remarks may apply to this matter, in the hope that we shall not have to recur to it in a more explicit manner."

BYFORD ON NEURASTHENIA.

In Byford's 'Diseases of Women,' page 352, we read: "Neurological writers, among whom are Drs. Weir Mitchell, Beard and Professor Jewell, ascribe neurasthenia to an exhausted state of the nerve centres. If I rightly understand what they mean by this it is that the brain and spinal cord have become damaged by overaction. I do not mean by *damage*, structural lesion, but a condition in which the cell action is slow, labored and painful because the parts have been overworked, and according to this method of interpreting the symptoms they prescribe rest as one of the essential parts of the cure. This is so different from the way I look at the subject, that I will risk a concise statement of my views.

I think that the nerve centres do not become exhausted, but that the blood circulating through them does become exhausted of the material necessary to promptly renew the loss during functional action of the nerve centres. On account of the want of general vigor the heart and arteries may not transmit the blood through them in the usual quantity, but if the circulation is not deficient in quantity the blood itself is deficient in quality. With a deficient supply of nutritive material their functions are performed irregularly and imperfectly, and there is neurasthenia."

"If my explanation of the origin of neurasthenia is correct, absolute rest is not so important to the cure as full feeding."

Is not here attempted a distinction without a difference? None of the writers mentioned claim that the nerve centres get their nourishment from any other source than the blood, and in Weir Mitchell's rest cure he does not claim that the rest is more important than the feeding. No one supposes

that rest is going to nourish the nerve centres, but only prevent their expending force as fast as they acquire it.

The rest cure, in its strictest form, is not urged as absolutely requisite to patients who are still vigorous enough to take active exercise, but to such as are so debilitated that to expend force in active exercise would leave them none in reserve.

A prominent feature of the rest cure is exercise, that is, passive exercise, by means of "electricity and massage, the object being to get the effects of exercise upon the nutrition and circulation without the expenditure of the patient's nerve force" (H. C. Wood).

Dr. Byford says the nerve cells "become anemic, and in this way nervous exhaustion occurs, and we have with the original sympathetic symptoms or succeeding them, neurasthenia."

What is the difference between this and ascribing neurasthenia to "an exhausted state of the nerve centres," as he avers Mitchell, Beard and Jewell do?

The point agreed upon is that the nerve centres expend force too fast in proportion to their acquisition of force (as a matter of course, from their only source of nourishment, the blood), and while Byford's plan of full feeding with active exercise aims to increase the income to the nerve centres, it fails to equally limit the expenditure. It is adapted to a certain class of cases not extreme in their degree of neurasthenia. The so-called "rest cure," full feeding, with passive exercise, not only increases the supply of nourishment to the exhausted nerve centres, but limits to the utmost their expenditure until such time as they have grown rich in strength and can afford it. It is practicable and has been proven eminently useful in cases where systematic active exercise was attempted in vain or was out of the question.

Why not give Drs. Weir Mitchell, Beard and Professor Jewell due credit for what they have done?

New Books and Pamphlets.

THE PRACTICE OF MEDICINE AND SURGERY APPLIED TO THE DISEASES AND ACCIDENTS INCIDENT TO WOMEN. By W. H. Byford, A. M., M. D., Professor of Gynecology in Rush Medical College and of Obstetrics in the Women's Medical College, etc., etc., and Henry T. Byford, M. D., Surgeon to the Women's Hospital of Chicago, Gynecologist to St. Luke's Hospital, etc., etc. Fourth Edition. Revised, rewritten and very much enlarged, with 306 illustrations. Philadelphia: P. Blakiston, Son & Co., 1888. 820 pages.

The book before us is a handsome volume in half morocco and gilt title and gilt edge, much more elegant in appearance than the majority of medical books. Yet the price is not higher in proportion. The next point that strikes the observer is the beauty and originality of the illustrations, quite a relief after seeing so many of the cuts in medical works copied or loaned and repeated in various editions till any beauty they may have possessed is worn out. Upon examining the text we find numerous improvements on the earlier editions, which recent advances in this branch had made necessary. The treatise is very systematic and so arranged as to chapters and sub-heads as to be easy of reference. It is evident that the writer is experienced daily in the subject of which he writes. The habit of instructing classes of students may account for his authoritative manner.

The opinions and methods of other writers and operators are always cited, and Byford's idea or modification is never omitted. The examination of the female pelvic organs is treated in detail and numerous illustrations. The mechanism of lacerations of the perineum and pelvic floor receives more attention than is usually bestowed, being discussed at length and some twenty-three varieties of laceration figured. Altogether the student will find this a very plain and explicit treatise and the practitioner will find it a definite and positive consultant.

A MANUAL OF MEDICAL JURISPRUDENCE WITH SPECIAL REFERENCE TO DISEASES AND INJURIES OF THE NERVOUS SYSTEM. By Allan McLane Hamilton, M. D., with Illustrations. New York : E. B. Treat, 771 Broadway, 1887. Price \$2.75.

This is just such a book as we should have expected from Dr. Hamilton, and it will take a high and permanent place in the literature of its class. The chapter titles will give but a poor idea of the real contents of the book, but they are as follows: "Insanity," "Insanity in Its Medico-Legal Relations," "Hysteroid Conditions and Feigned Diseases," "Epilepsy," "Alcoholism," "Suicide," "Cranial Injuries," "Spinal Injuries." The mass of the information is as instructive to the practitioner as a treatise on nervous diseases, and there are many points especially useful to examiners for pensions and life insurance. There is much sound advice to the medical witness which will aid many a physician when called to the stand, to avoid the snares of opposing counsel and testify with credit to himself and the profession.

NOTES AND COMMENTS.

THE NORTHEASTERN OHIO MEDICAL ASSOCIATION.

At the last meeting, in Akron, of this society the following officers were elected to serve the ensuing year :

President, Dr. B. B. Loughead, Ravenna; first vice-president, Dr. A. E. Foltz, Akron; second vice-president, Dr. A. B. Campbell, Canal Fulton; recording secretary, Dr. C. W. Millikin, Akron; corresponding secretary, Dr. A. K. Fouser, Akron; treasurer, Dr. E. W. Howard, Akron.

The following standing committees for the year were appointed: Admissions—Drs. Starr, Fisher and Phillips.

Publication—Drs. Belden, H. G. Sherman and Campbell.

Finance—Drs. Conn, J. E. Dougherty and L. E. Sisler.

Ethics—Drs. L. S. Ebright, A. M. Sherman and W. T. Barnes.

Obituaries—Drs. Howard, Everhard and Wright.

Also the following appointments for next meeting—Essayist, Dr. N. S. Everhard; alternate, Dr. A. B. Campbell, lecturer, Dr. W. T. Barnes; alternate, Dr. E. W. Howard. Written report of cases, Drs. A. C. Beldin, L. E. Sisler, M. M. Bauer, D. B. Smith, A. W. Ridenour, James Fraunfelder.

Topics for discussion—"Physiological and toxic effects of Cinchona salts," to be opened by Dr. E. Conn; alternate, Dr. W. C. Jacobs.

The next meeting will be held in Akron.

The committee on obituaries read tributes of respect to the memory of the following deceased members: Dr. Mendall Jewett, H. C. Howard and Louis J. Proehl.

An important step in advance has been taken by the Medical Department of Western Reserve University in making the three years' graded course requisite for graduation, beginning with the session of 1888-9.

The Medical Department of Wooster University announces the opening of its regular course on Thursday, March 1. Dr. Arms will deliver the opening address at 8 o'clock Thursday evening, March 1, in the College amphitheatre.

A Towering Genius.—The genius of modern faith curers has appeared at Boston, and his name is Dresser. "Dr." Dresser announces that on receipt of a letter or telegram from a patient at any distance whatever he will promptly cure him. This method of curing at a distance was formerly the exclusive property of the Fathers of the Church, but iconoclastic Boston has stripped it of its sacerdotal character, and the plan is now the common property of ingenious charlatans.

The advantages that this variation of mind-healing offers over those in more common use are such as must commend it to all faith curers, Christian science practitioners, homœopaths, *et sui generis*, and they should hail "Dr." Dresser as the master spirit of the fraternity. It removes all the

fatigues and annoyances of a physician's life. He can keep his horse and buggy for pleasure excursions, rent out his office, sell his impressive exhibit of instruments, and need only retain his postoffice box and his telegraphic address. Besides this, the whole world lies at his feet. Wherever the mails go or the telegraph wires penetrate, he can treat his patients with the utmost ease and convenience. The longer one contemplates this plan of practicing medicine, the more admirable does it become. Certainly it is the perfection of quackery.—*Pittsburgh Medical Review.*

Diphtheria is treated at the Children's Hospital with perchloride of iron internally. Barlow advises the administration of small doses of mercurials if the tongue be coated. In Vienna all cases are treated locally with lactic acid, and cases of laryngeal or septic diphtheria were treated internally with calomel, and also with inunctions of mercurial ointment. Tracheotomy is here, as in all European hospitals, performed early. Last year about 49 per cent. of tracheotomies for laryngeal diphtheria recovered; this year, owing to the more malignant type of the disease, about 30 per cent. got well. Belladonna is employed here as a heart stimulant for this condition. In severe cases as much as ten drops of the tincture have been given every two hours with marked benefit. If the child be unable to swallow, nutrition is kept up by feeding through a nasal tube and by the use of nutrient suppositories of peptonized beef.—*Dr. Snow writing from London to Medical Press of Western New York.*

Few things are more important to the health than the food (including drink), air and exercise. In the first great division three important articles, namely, baking powder, by means of which wholesome bread may be made, and tea and coffee, universally popular beverages, are furnished in their purity by the Great Atlantic & Pacific Tea Company.

Commencement day at Columbus Medical College will occur about March 15.

Town Topics, the latest candidate for the favor of the Cleveland reading public, commenting on a humorous illustration occupying the entire first page of that journal, very pertinently says: "One may disclaim heresy in any form, and yet doubt that 'Christian science will either subdue an ulcerated tooth, or nullify the action of hydrocyanic acid; that it will knit a broken leg, mend a dislocated neck, or grow a finger to a stump; and one may doubt that it is destined to take the place of good sense and science—trifling obstructions to the progress of superstition and—to put it mildly—idiocy."

A successful winter session at the Western Pennsylvania Medical College, city of Pittsburgh, will close during the last week of March.

Bellevue Hospital Medical College closes its winter session about the middle of March, and immediately opens its spring session, which continues till the middle of June.

Twenty-five hundred dollar practice for sale in beautiful town fifty miles west of Cleveland, surrounded by a rich farming country (with or without residence), and full equipments. Address Dr. A., CLEVELAND MEDICAL GAZETTE.

According to Ultzman the standing position is the most advantageous for emptying and washing out the bladder, and is the most practicable whenever the patient is strong enough to stand. He prefers a soft catheter and hand syringe to any form of metallic or other irritating apparatus.

We commence in this issue a series of articles on Vesico-Vaginal Fistula. The cases that will be detailed are of more than usual interest, and we bespeak for the series the attention of our readers.

Dr. S. Weir-Mitchell says that "the books on mind cure are calculated to make much and serious evil. I have read them with much care and have always arisen from them with the sense of confusion which one would have if desired to study a pattern from the back of a piece of embroidery. I think that most trained intelligences will, with books like these mystical volumes, require an amount of care and thinking to avoid bewilderment of which the mass of men and women are not possessed. Every neurologist sees already some of its evil consequences, and I, myself, have over and over had to undo some of the evil it had done."—*American Lancet*.

John Woodall, the Barber-Surgeon.—In the time of Charles I., of England, one John Woodall, of the Company of Barber-Surgeons, was elected to fulfill the office of supervising and arranging the medicine-chests for the navy. He issued a treatise to accompany each chest, with directions how to use the remedies, and closed with the following advice to young naval surgeons:

"Let surgeon's mates, to whom I write,
Be warned by me, their friend,
And not too rashly give a dose,
Which then's too late to mend.

For many a good man leaves his life
Thro' errors of that kind,
Which I wish young men would avoid,
And bear my words in mind.

Tho' sulphur, salts and mercury,
Have healing medicine store,
Yet know they're poison, and can kill;
Prepare them well therefore."

Despite the seeming impertinence of this doggerel, Woodall was a right good surgeon in those days; he introduced the use of lemon-juice into the navy, for the prevention of scurvy, and tobacco-juice enemas for intestinal obstruction, the results of his own practical experience. He also devised the trephine, suggested amputation for gangrenous limbs, and the employment of ligatures on large trunks.

There is a copy of his book, 'Viaticum, the Pathway to the Surgeon's Chest,' in the British Museum in London.—*Medical World*.

—THE—
Cleveland Medical Gazette.

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MARCH, 1888.

No. 5.

ORIGINAL ARTICLES.

**THE OPENING ADDRESS BEFORE THE MEDICAL
CLASS OF WOOSTER UNIVERSITY.**

BY DR. C. C. ARMS, CLEVELAND, O.

GENTLEMEN: My respected colleagues have honored me by assigning to me the pleasant duty of addressing you on this occasion.

Your presence indicates that you have decided to make the study and practice of medicine your life work. I need hardly remark that the step which you are now taking is the most important of your whole life. Look about you in the different departments of industry, and you will be reminded of the truthfulness of the poet, that "Not every blossom ripens into fruit." There are many failures in medicine, in ministry, in law, the sciences, arts, in merchandise, in husbandry, and in every walk in life.

We speak loosely of the fates, fickle fortune, chance, luck, good and bad, just as if man in this world were tossed hither and thither by forces over which he has no control. But the scientist knows that every cause produces an effect; that

every effect is the result of one or more causes, and either alone or combined with other effects become causes producing new effects, and so on *ad infinitum*.

The wind only apparently bloweth where it listeth, and if we cannot tell whence it comes, or whither it goes, it is because we are ignorant of the causes and effects or forces which direct its course.

The career of every individual is determined by causes, which, though complex, are as certain and immutable as are the operations of nature. It, therefore, becomes you to study well yourself, your tastes and powers, and to do so with humility; it may be with misgivings, remembering the injunction, "Let him not boast who puts his armour on, as he who puts it off, the battle done." Why have you resolved to study medicine? It is said that the father of the poet Watts was greatly adverse to his son making rhymes, and finding that admonitions were of no avail, as a last resort he gave the boy a severe flogging; amid the smartings of that painful moment, the youth piteously cried, "Oh, father, do some pity take, and I will no more verses make." We need not ask why he became a poet; he was born such.

A gentleman on visiting the home of the late Matthew Hale Carpenter of Wisconsin, found a bright lad of twelve summers. He propounded to him the usual question: "Well, Paul, what are you going to become when a man?" Paul thoughtfully replied: "I would like to be a hack-driver, but I suppose I have got to be a United States senator." In this ingenuous reply we see not an invincible, predestined bent of the mind as in the case of the sacred poet, but, unfortunately, inclination at variance with duty.

We all remember how, in our boyhood, we loved that noble animal, the horse, and will not condemn the youth, but rather applaud his boyish vivacity, trusting that maturer years will do for him what it has for us in harmonizing tastes and duty; if such, however, should not prove to be the case, far better would it be for master Paul to give up the idea of

following in the footsteps of his illustrious father, and give himself over to whatever nature designed him. It is better even to be a good, pious and successful hack-driver than a poor lawyer, meeting through life with nothing but disappointment and defeat.

The famous surgeon, the late Professor Pancoast, once received a young, perfumed, kid-gloved city gentleman, who was really in doubt which would be most congenial to his tastes, the profession of medicine or law. At the suggestion of the wily and humorous doctor, the young man concluded to hold for a while his decision, *sub judice*, and accepted the kind invitation to accompany and assist the professor in his extensive practice. The first visit made was at the home of a poor and squalid woman, who was suffering from a rectal trouble. Under the supervision of his master, the young man inserted his finger and applied gentle but persistent pressure on the concave surface of the sacrum. Straightway the doctor excused himself for a few moments, after admonishing his pupil not to desist from his purpose during his absence, lest the woman's death should be traced to his own neglect of duty. That was a long and weary hour during which the doctor was away, but withal a profitable one to the young man, who on leaving the house took leave also of the professor, informing him that he had fully made up his mind to study law.

Is the desire to acquire wealth the determining factor in your choice of life work? If so, I think you could not make a greater mistake. With a few fortunate exceptions, wealth is acquired only by those who give themselves over, heart, mind and strength, to its acquisition. It is their study by day and their care by night. Their aim is vanity and their end too often is pain. The true physician has a nobler ambition; he has no time to think of money, and, if an enthusiast, no desire save as necessity requires. John Hunter, the greatest surgeon England ever produced, exemplified this thought when, on arising from his study of anatomy and laying aside his scalpel and forceps, he remarked to a

pupil and intimate friend: "Well, Linn, I must go and earn that confounded guinea, or I shall be sure to want it to-morrow." Probably no American physician and surgeon ever achieved greater success than Dr. J. Marion Simms, the scientific founder of gynecology. France, Spain, Portugal, Italy and Belgium vied with one another in investing him with their decorations, and Napoleon III. made him a Knight of the Legion of Honor. During his residence in Paris, he wrote as follows: "No man in our country, solitary and alone, ever made as much money as I have by my profession, except, perhaps, Doctor H., and yet I am comparatively poor and must work for my daily bread. I am not extravagant and never gambled. I have lived well and have educated a large family of children, and I have only found out lately that my agent, who managed my business for the last fourteen years, stole from me not less than one hundred thousand dollars." All intent upon his work, treating the poor with as much consideration as the rich, his enthusiasm was the cause both of his success and his comparative poverty. Often have I heard Professor Gross repeat to his students that celebrated saying of Deupuytren, "Gentlemen, my poor patients are my best patients, for God is my paymaster." It is said that Abernethy turned aside from his due visit to a prince to go to the bedside of a man who he knew had nothing to pay, muttering as he drove off, "The Prince of Wales can have twenty surgeons if he wants." No man in my native Green Mountain state was more sincerely loved than Dr. Samuel White Thayer. A gentleman of the old school, he stood at the head in his profession and was the chief consultant throughout the northern and middle portions of the state. When he died the beautiful city of Burlington went into deep mourning, and at his funeral the text of the preacher was, "The beloved physician greets you." In his sermon he said of him, "Was it his failing that he did not make money by his profession? Then it was one of those failings which lean to virtue's side. Was there something almost morbid in his disregard of his just dues?"

If this were a fault, like all human faultiness, it was a pity. But let us be glad that once in a while there lives among us—lives and works, and works at the hardest—one who finds his pay in his work, not in its emoluments.” In the evening of his life, his health becoming somewhat impaired because of much needed rest, generous citizens raised a purse and sent him to Europe. On his return he met one of his old pensioners, who was not slow to stop his chaise to greet him, “And so, doctor, you’ve got home, and they say you have been across the water.” “Yes, Pat, and to Ireland too, and I’ve seen Dublin.” “Ah, but, doctor, that’s a fine city, Dublin.” “Yes, I saw many fine sights there.” “And sure, did you see anything finer than yourself, docther?” There is a rich humor in this Irish wit, but who can doubt but that the sentiment came from the heart? Yes, gentlemen, there is an incompatibility between the practice of medicine and getting rich, and the doctor who is exorbitant in his charges and close, exacting and merciless in the collection of his fees, is a black sheep in a white flock. He is a marked man in the community in which he lives, and is talked about with disfavor. He is a disgrace to his profession.

It is estimated that there are now in the United States, including all kinds, about 120,000 disciples of Esculapius, being in the proportion of 1 to every 600 of its inhabitants. England, Italy and Hungary have 1 to 1,600, while Austria, Germany and France have 1 to about 3,300 inhabitants. The greater number of physicians in this country as compared with the western countries of the old world is, no doubt, due to that glorious principle first enunciated in our Constitution—the right of everybody, barring woman—I mention the exception with shame—to make of himself what he can, irrespective of the accidents of birth and environment. In Europe no one is allowed to study medicine unless he has been so fortunate as to possess a collegiate education. The medical schools with all their appointments, belong to the state; their officers and teachers are appointed and salaried by the state,

which holds them responsible for their efficient teaching. In some countries the degree of M. D. is obligatory with those who have enjoyed the privileges of these institutions, somewhat as in this country graduates of the military and naval academies can be held to their promise, which they made under oath, that they will serve a definite period in our army and navy.

The American method of medical instruction differs from the European as distinctively as does our government, and is the legitimate offspring of our free republic. The American medical student comes from the plough, the work-shop, the school-room and the college; he presents himself at the medical school, saying: I desire to study medicine; I am willing to work hard and will pass all your examinations. Will you receive me? The reply is: We cheerfully take you, and if after a certain time you pass our examinations, we will bestow upon you the degree of doctor of medicine. While we may be justly proud of the freedom in this country of every man to make the most of the powers God has given him, it must be remembered that too great freedom in making doctors, as in other matters, works injuriously to the welfare of society. That there has long been a plethora of the species *medicus* in our body politic, goes without saying. The laity wonder how they all get a living; the profession itself for more than a third of a century has raised its voice against the growing evil, and has been importunate in its appeals to the state for relief.

I am happy to-night in the belief that the rectification of the evil is at hand. I believe it is coming, not by direct legislative prohibition, but in a far better and more lasting way—by the profession raising its standard of education. It is only about ten years that the requirement of a candidate for graduation to show evidence of having studied medicine three whole years has been strictly and universally enforced. Only within the present decade has it become impossible for a medical student to attend his two courses of lectures, thus completing his college work in a single year. When I com-

pare the extensiveness and thoroughness of the examinations of this school with those of my own *alma mater*, when I was graduated, and when, perchance, I asked myself the question: Arms, could you just twenty years ago have passed your own examinations of to-day? I am almost visibly affected through fears and congratulations. In May, 1886, the Illinois State Board of Health resolved that it would recognize no medical college as being in good standing whose aggregate graduates during the period of five years exceeded 45 per cent. of the number of its matriculates. Some of the best colleges in our country have established graded courses of instruction, and not only advise but require three full courses of lectures in three full years as pre-requisites for graduation.

The time is not distant, but even now is at hand when the exact requirements for admission to medical colleges will be rigidly adhered to and published to the world in their annual announcements. The legitimate and beneficent results of these restrictions are already beginning to be apparent. For the first time in the history of medical education in this country, the number of medical students and graduates is decreasing. In 1882 and 1883 the number of students was 13,088; in 1883 and 1884, 12,762; in 1884 and 1885, 12,002; in the same years there were graduated 4,215, 4,001 and 3,831. Thus in the last three years of which we have statistics, there has been a decrease of 1,086 students and 384 graduates. The good work, I believe, will go on. The state will help a little, indirectly, by intrusting to the profession matters of public health and hygiene, but the burden of diminishing the number by improving the quality of physicians must be borne, and the work actually accomplished by the profession itself, and this is as it should be.

Such, gentlemen, is the condition and feeling of the profession which you propose to enter. It may be, as you compare your present attainments with the high standard and rigid requirements now demanded, you will be troubled with doubts and misgivings. It is a matter of regret that some of

you, doubtless, are poorly prepared to enter upon this proposed struggle. Marked defects in early preliminary education are but seldom overcome in after life, and are carried like scars or grosser physical deformities to the grave. The man who at twenty knows not how to spell the common words he has all his life been using, or is ignorant of the established principles upon which the expression of thought is based, can do better in life than study medicine; or, if he insists upon his hazardous venture, let him first master orthography and grammar. We want nothing to do with such one. On the other hand, a knowledge of Latin and Greek limited, if it can not be extensive, will greatly assist you in understanding the fundamental meaning of technical and scientific words. It will also endow your diction with simplicity and perspicuity, and adorn your style with many of the graces of composition, but it is not absolutely essential to your success. A preliminary knowledge of the rudimentary principles of physics or natural philosophy will enable you to better comprehend the mechanism and functions of the human body, the advantages and power of the manifold appliances of surgery and the *modus medendi* of medicines, but all this can be acquired through assiduity and perseverance in the study of our profession.

Less than 50 per cent. of the graduates of the Harvard Medical College are bachelors of art, of the New York and Philadelphia schools hardly 12 per cent., and of the schools in the middle and western states not 6 per cent. are graduates of a literary college. The great majority of our representative men in all the professions never receive a collegiate education. Their career in life would probably have been more brilliant had they been the recipient of such good fortune, but that such early training is not absolutely necessary to the achievement of success, their honorable and successful lives attest. Let me then entreat you to take with sublime audacity of a living faith this motto: "What other men, under similar circumstances have done, I can do." The studies, gentlemen, which you will here pursue have

quite a different bearing from those which have previously occupied you. Heretofore your labors have been preparatory and general in their nature, with the view of broadening the foundation of your education; these objects are seemingly remote, but the field in which you now enter is your *life-prize*, and with this thought comes the feeling of responsibility. You are no longer boys, but men. If at times you cut a lecture, so much will not be gained as in by-gone days, but it may prove to be a serious loss. What you will here acquire will be your stock in trade; you will here see practical demonstrations of facts which, though you may read of them in your books, you may never see demonstrated after leaving college. The time has come for you to plan, not how little, but how much you can do and learn. In this school we have been pained in hearing students cavil at our requirements. How often have I heard something like this: In such or such a school two parts of the body constitute a whole dissection, but you require us to dissect three parts, just as if we were task-masters and were imposing grievous burdens. If it shall ever be my fortune to hear from a student the words, Sir, I rejoice that in this institution we can dissect three whole parts instead of only two in a single term, he will exhalt himself, in my estimation, to the clouds. Be not in a hurry to graduate; it will pay you to take a long and thorough course of study before starting upon your career. Dr. John H. Rauch, in a recent report on medical education and medical colleges, says: "During the past nine years I have followed up with special interest and care the careers of 789 out of 1,000 physicians who studied four years and attended three terms before graduating; these are, with few exceptions, the successful and prominent members of the profession in the different communities in which they reside; they are well equipped by general education, by an ample period of professional study, by didactic and clinical instruction, and by hospital practice. They are successful, as a rule, because they have fitted themselves to command success."

It is not my province to dictate or even to suggest for your special consideration any particular dogma of religious faith. You will work out such problems for yourself. It may be that the scientific methods of reasoning in which you will be trained, will engender doubts and even cause the pendulum of your belief to swing to the opposite extreme ; but if you are honest and true to yourselves, it will find its level in due time. Your views of life and duty will develop and expand, and you will be made all the better by its oscillations. You will pardon me in referring to my own experience when I say that I have perused the Bible with pious devotion, but never have I been more profoundly impressed with the goodness and wisdom of God than while contemplating the wonderful adaptation of means to end in the mechanism of the foot, the hand, the spinal column, the brain, the lungs, the heart or the organs of elimination, generation or special sense.

I think it was Pope who exclaimed, " An undevout astronomer is mad ; " so also can it be said of the anatomist and thoughtful physician. What vocation is more ennobling than that whose aim is to lessen the woes of suffering men and agonizing women, to diminish the sense of pain in the world and prolong useful lives ? What wonder Cicero said, " He who heals the sick walks with the gods." It is morally impossible for a man who zealously devotes his life to science and humanity to go to the bad, whatever may be his honest belief respecting the unknowable.

A few words about your student life. It is said that Dickens' humorous creation of Bob Sawyer, a rowdy and dissipated fellow, with linen greatly sinned against, with a pipe and foul language alternately in his mouth ; the dread of every modest girl, the unfailing nuisance of every public meeting, where he would stamp and crow and misbehave himself, was a true picture of a certain disreputable class of medical students that existed in England at the time it was drawn ; but we have abundant testimony that even then this class were in the minority, and Mr. Bob Sawyer and his chum, Ben Allen, no more represent the medical student of to-day than do Mr.

Squeers and his cruel school our modern private institutions of learning. Still many of you come to this city, strangers, and as such may feel that you are free from the restraints that society naturally enjoins upon us. The thought that nobody knows or cares about us is apt to beget in ourselves quite similar reciprocative feelings, and serve as a license for conduct which would not be thought of were our surroundings different. I do not refer especially to dissipation and vice, for of these idle brains are votaries; and I have full confidence that an early morning quiz, followed by six or seven hours of clinics and lectures, will prove an efficient prophylaxis against nocturnal revelries, but rather to less pronounced manifestations of rudeness and vulgarity that the sense of irresponsibility engenders. Guard against this feeling and cultivate the qualities of a gentleman. The public will judge of your professional attainments by your personal demeanor; you cannot too soon supplant rusticity, if you possess it, for urbanity of manners; and this transformation, if genuine, must come from the soul. Incorporate into your own nature Emerson's definition of a gentleman, "High erected thoughts in a heart of courtesy." We can not open to you the door of social life, for our art is a jealous mistress and proscribes such pleasures, but in this city of refinement and culture, you will have abundant opportunities of increasing your store of general knowledge.

At the Public and Case libraries, and the reading rooms of the Y. M. C. A., you will always be welcomed, and an hour thus spent will prove both instructive and recreative. Let lectures on popular themes attract you, and music, with its sweet and refining influences, invite your presence. On Saturday evening, if your means allow, visit the opera or theatre, if, perchance, a good play is being presented. Let the Sabbath be to you a day of rest and absolute cessation of weekly thought and toil. Attend divine worship. While of course you will be courteously received by all the churches in the morning, in the evening the pews are free.

Finally, gentlemen, be diligent and fervent in your work, and it will follow, as surely as the night the day, that happiness and success will crown your efforts.

VESICO-VAGINAL FISTULA.

BY REUBEN A. VANCE, M. D., CLEVELAND, OHIO.

(Continued from page 140.)

CASE I.—VESICO-VAGINAL FISTULA FROM SLOUGHING.

Sarah Kinney; married; aged 26; 35 Kelley street. When between six and seven months pregnant with first child was greatly frightened by the house catching fire. Pains came on irregularly for about a fortnight: then became severe and continuous, and at 11 P. M., on the twenty-third of October, 1885, the waters broke—the doctor was at once sent for and responded within half an hour. He made an examination, said she needed rest, directed the husband to leave work and remain with her next day, and administered a hypodermic injection in the back, that gave her quiet sleep that night. The next day (October 24) she was greatly nauseated and vomited freely, but pains of a severe character did not recur until towards evening. The doctor was summoned, administered a hypodermic in the arm at 6 P. M., and left to return later. Pains became so violent that he was immediately recalled, and remained until 9 P. M. He was again sent for in haste, at 1 A. M., October 25, and in half an hour—ten minutes after the doctor entered the house—the body of the child was born. The manipulations employed by this practitioner failing to complete the delivery, another physician was sent for after daylight in the morning; he speedily disengaged the head. The child, which was between the sixth and seventh months of intra-uterine life, was dead. When bowels moved four days subsequently a large slough passed and urine commenced dribbling. The slough was saved

and given to the consulting physician, who, upon examination, pronounced it the wall of the bladder. Within a fortnight of delivery was removed to a hospital for treatment. Here, at different times between November, 1885, and May, 1886, six operations were performed upon her. She was on the point of returning for the seventh operation when pregnancy was suspected. She then remained at home, 35 Kelley street, until September, 1886, when I was summoned to take surgical charge of the case.

October 12, 1886. The following notes represent her present condition: The external organs of generation are swollen, excoriated and covered with sabulous material; all the urine passes through the vagina; the urethra is patulous and its orifice cedematous and angry looking; a firm collar of contraction is felt within ostium vaginæ, through which it is barely possible to insert the finger—when introduced the latter immediately enters the bladder. A mass of exquisitely tender induration seems to occupy all the true pelvis above the zone of contraction at the pelvic outlet, and all the internal parts are encrusted with a limy deposit. No information could be obtained by exploration through the rectum. Patient's pulse 130, face flushed, tongue red and dry, hectic fever every afternoon. Physical examination of the chest shows no evidence of thoracic disease. Patient supposes herself four months pregnant. Upon consultation with Dr. D. S. Perkins, the then family physician, it was decided to devote every attention to the amelioration of the patient's condition and to postpone operative interference until after the termination of pregnancy. Injections of hot water in large quantity were employed twice daily; the external parts were lubricated with Turner's cerate, and nitrate of silver was employed to the parts encrusted with sabulous material until the latter was cast off and the excoriations healed. Whilst the rigidity of the vaginal contractions was little affected by this treatment, the patient's comfort was enhanced, and the painful indurations of the upper pelvis disappeared.

Dr. D. S. Perkins remained in charge of the patient and faithfully and efficiently ministered to her wants until labor came on, March 2, 1886. The necessity for instrumental aid soon manifesting itself, I was summoned and applied the forceps. This proved a very severe task: the collar of induration at the pelvic outlet interfered with the application of the instruments, and when they were finally introduced it seemed for more than an hour that no effort consistent with the woman's safety could effect the delivery of a living child. Partly by stretching, partly by lacerating and finally by freely incising all presenting bands, a nine pound living child was brought into the world, whose robust frame and sturdy health now (February, 1888) give little token of the trials his mother encountered in bearing him. Repeated explorations satisfied Dr. Perkins and myself that there was no abnormality in the bony walls of the pelvis.

The position of the womb, the situation of the lower border of the fistula in close proximity to the urethral inlet, the large size of the vulvar orifice and the manner in which the urethro-vesical structures descended when the exaggerated lithotomy position was assumed, seemed sure indications that this case was one peculiarly adapted for Simon's operation. During her pregnancy the crucial test—the exposure, in proper position, of the edges of the opening with Simon's speculum—could not be applied. Soon after delivery it was attempted. The cicatricial bands had been recently severed, and all the pelvic structures stretched by the birth of the child. Consequently it would be imagined that no vaginal contractions could stand in the way. Yet when it was attempted to expose the lesion with Simon's speculum, the result was extremely unsatisfactory. A number of trials were made, and different sizes of the instrument used; and although in the end the fistula could be seen and its borders readily handled, yet it was apparent that an operation for its closure could not be performed as advantageously after this method as was at first thought. When the vaginal inlet was at its largest, and the parts most readily exposed, the

smallest instrument failed to show the whole of the fistula. By increasing the size of the instrument a point was reached where the whole circumference of the opening was brought into view: the speculum that would effect this revealed also a difference in the level of the edges—on the left side (of the patient) the border of the fistula abruptly receded toward the pubic ramus, while its sharp edge projected directly forward. With the largest blade of the speculum this irregularity of plane was rendered less apparent, but the whole fistula seemed moved towards the left and inclined to the ramus, while the tension on adjacent parts was so increased that it became impossible to make the edges of the fistula approximate. Consequently the idea of operating by Simon's method was abandoned.

The view afforded by a Sims speculum, the patient being in the semi-prone position, was very much more satisfactory. With a small instrument the parts about the fistula and the opening itself could be seen. A striking difference between the view afforded by Simon's speculum and that revealed by a Sims, was in the apparent situation of the vesico-vaginal opening: with the latter, its centre was in the median line and its edges occupied the same plane. In the softened state of the parts during the fortnight after delivery the best view ever had of the pelvic structures was obtained—in fact, it was then that I first made a satisfactory visual observation of the fistula and parts surrounding it. The opening in the septum was within a third of an inch of the vesical extremity of the urethra below; above it reached to within half an inch of the neck of the uterus, and was of such dimensions as to admit three fingers into the vesical cavity. Its general outline was an irregular oval with its long diameter from side to side; its edges were thin and sharp, and even at this time required firm traction on the neck of the uterus for them to be brought into apposition. The parts were observed almost daily from this period until the operation for the closure of the fistula was performed, and as time elapsed, notwithstanding the daily use of large quantities of very hot water and

the incessant search for and section of bands of contraction, the vagina constantly grew smaller, the old collar-like induration just within the ostium began to manifest itself anew, and daily encroached more and more upon the genital passage. The vagina under the influence of these forces seemed to contract in all directions and grew smaller in all its diameters. The fistula diminished also, but to a less degree in proportion than the vagina—at the time of operation it would admit two fingers. The most unpromising thing about it was the character of its edges: they remained thin, sharp and rigid to the day of operation. Two days before operating a final effort was made to loosen the upper and left lateral border of the vesico-vaginal opening by a free dissection of the cicatricial tissue at that point, with but slight relief.

Friday, April 8, 1887. Assisted by Doctors D. S. Perkins and William H. Capener, I this day operated on Mrs. Kinney at her home on Kelley street. A support was improvised out of a bench such as is used to hold tubs in washing: it was wrapped with blankets and across this the patient was placed in a position midway between the right angle and knee elbow. The vagina had so contracted within a few days that the Sims speculum, heretofore used, would not work, and a Weber speculum—one in which the width of the blade can be regulated by screw and hinge—was substituted and found satisfactory in every respect. With knife and scissors the fistulous edges were removed in an unbroken circle: the thin denuded upper edge was then split as high as the neck of the uterus above and to the angles of the opening on either side. Needles, carrying loops of silk, were then passed from below upward through the fistulous edges, care being taken to enter the lower margin on its vaginal aspect one-half inch from the edge, to emerge near the vesical lining, thence to enter at the split in the upper border and to emerge where a firm grasp could be had on the tissues of the cervix. The only exception was in the central strand which had to start from tissues that made part of the wall of the urethra—here a quarter of an inch grasp could alone

be had. Three loops were passed on either side of the urethra, and were followed by silver wire number twenty-six—the seventh loop, through the urethral wall, and in the centre was the last passed and the last tightened. Less trouble than had been anticipated was experienced in bringing the fistulous edges into apposition—the uterus was grasped in a volsellum and forcibly drawn downwards; the strands of wire were carefully shouldered so that the fistulous edges were neatly apposed, and then first the one next the urethra on the right was secured, then the one on the left, and so on until all were closed but the one grasping the urethra. Some difficulty was met with in getting this one into satisfactory position, but finally it too was secured. The wires were not twisted but fastened with clamps of perforated shot compressed on the wires after they had been rendered all equally tense, and the edges of the fistula everywhere proved to be in accurate apposition. At this most anxious stage in the operation great comfort was derived from three points of detail—first, the split upper lip that furnished a much needed supply of transferable material; next, the large wire employed that held its shape well when moulded into form, and the firm grasp taken of the uterus that relieved the fistulous margins of all tension until the sutures were adapted and fastened. No anæsthetic was used and the operation lasted one hour and ten minutes. A Sims self-retaining catheter was inserted and the patient left with her nurse.

It is satisfactory to be able to say that for the next fortnight there was not the slightest misadventure. Never was a patient more determined to do all her duty in seeking to recover. The nurse was a model of self-sacrificing care, and Dr. Perkins watched and tended the patient with the most devoted solicitude—at first, twice a day he personally supervised the administration of the hot vaginal douches of large quantities of water kept all the time at as high a temperature as the patient could bear, in itself a serious demand on the time of a busy man, and towards the last a constant visitor always on the watch for that calamity we apprehended

might occur at any moment. But it was not to be. On the fifteenth day after the operation, assisted by Drs. John Perrier and D. S. Perkins, I removed the wire sutures. This was fully as difficult a task as their insertion. The line of union was perfect at every point, but the rapid diminution in the calibre of the vagina since the operation rendered its exposure very difficult. When seen it was noted that it pointed up at its left extremity and down at its right and was bent upon itself and before backwards—the ends seemingly drawn towards the rectum, whilst the centre receded towards the symphysis. The speculum employed in removing the sutures was the Sims instrument, small size.

The subsequent progress of this patient has been satisfactory in every way. The behavior of the pelvic structures under the new circumstances surrounding them has been especially interesting. At the time the sutures were removed the vagina was a mass of cicatricial induration, bands appearing to run in all directions. After the catheter was removed—at the end of the third week from the operation—and the patient made an effort to retain urine for longer and longer periods, an improved condition of the anterior wall of the vagina became apparent. The patient called on me for examination at intervals of a month. At first I could not obtain a satisfactory view of the parts with any device; finally a small and then a large Sims speculum would work—ultimately I could employ with satisfaction the Weber speculum, by the aid of which the operation was performed. The improvement seemed due in the beginning wholly to the increased flexibility of the anterior vaginal wall. Of late I find that a Bozeman speculum, with its third blade in place, can be used. This is due to the fact that the collar of induration, that at one time threatened serious consequences to the integrity of the vagina, has melted away.

The influence of cicatricial bands in distorting natural structures was well illustrated in this patient three months after she was operated upon and at a time when she was able to come to my office for examination. The vagina was

so rigid and speculum investigation so unsatisfactory that I was in a measure compelled to obtain most of my information by digital exploration. As she was getting on the table she remarked that since the prior Monday, when she performed some unusually laborious household duty, she was troubled with incontinence of urine when walking. Inserting my finger in the vagina I was startled to find just in the position formerly occupied by the fistula a cavity with irregular edges that presented all the features of a vesico-vaginal opening. Hurriedly placing the patient in position I introduced a small Sims speculum, and with much misgiving, I must confess, glanced within. There in the site of the old fistula was the neck of the uterus, with all its ordinary features obliterated and the os strangely pulled out of shape by the very contractile bands that at one time had helped distort the fistula that was now no more !

During the interval that elapsed from the birth of her second child until the operation, the condition of the bladder was carefully noted. While the vagina was large it was possible to completely explore the vesical cavity, and the contraction of the bladder was remarkable. The situation and extent of the fistula above described clearly accounts for the absence of that part of the viscus corresponding with the greater portion of the vesico-vaginal septum—but this loss by no means sufficed to explain the diminished calibre of that organ. The slough, so far as limited to the septum, removed a portion—unsuccessful operations always destroy a certain amount of material—yet beyond the opening and far removed from the scene of the abortive operative experiments the walls of the bladder were dense and contracted. To whatever cause due, this condition seriously interfered with successful treatment, and at one time it really seemed as if a closure of the fistula would only check the dribbling of urine through the vagina and not supply her with a depot in which urine could be retained for more than a few moments at a time. This condition of the bladder and the difficulties encountered in the use of Simon's speculum led me

to study the peculiarities of the case with a view to the performance of kolpoplexis in the event of being unable to effect a satisfactory closure of the vesico-vaginal fistula. But as the history detailed shows, the latter was successfully obliterated, and then it became a matter of curious interest to watch the behavior of the bladder. For three weeks the Sims self-retaining block tin catheter was kept in the urethra; at the end of that time the nurse passed a soft rubber catheter at hourly intervals. If an attempt was made to defer the passage for a longer time the patient became distressed and the urine would flow involuntarily.

There was a time that it seemed as if the patient was acquiring the power of retaining the urine for a longer interval—occasionally two hours would pass without the necessity of introducing the catheter. But it was soon noted that the improvement was illusory—that it depended wholly on the rapidity with which urine was formed and not on any greater retentive power of the bladder—when the vesical cavity was full it demanded relief; and at the end of two months the quantity that could be retained was no greater than during the first week after the use of the self-retaining catheter was abandoned. At night if the urine was not voided every two hours it would dribble away. Very slowly the retentive power increased. With its increase the patient found herself able to sleep longer and longer without having to get up to urinate. After the use of the catheter was wholly abandoned, improvement became more manifest, and as the bladder dilated, the walls of the vagina grew more flexible. At the present time she can pass the night with little trouble if she is careful to empty the bladder on retiring and again early in the morning. During the day the calls to urinate are frequent, and the quantity of urine voided each time small, but no distress is experienced unless she exhausts herself with hard work—then towards the close of the day calls to micturate become distressingly frequent. If she is careful not to overwork, she has no trouble.

Difficult and tedious cases, long an anxious care to the

operator before a cure is effected, very frequently lead the surgeon to conclusions the reason for which he would be puzzled to state. This case satisfied me that one accustomed to operate mainly by Simon's method would see sufficient evidence for vaginal obliteration (kolpokleisis) in morbid states that one operating mainly after the method of Sims or Bozeman would give little thought to—that would certainly make no impression on him until he had failed to close the fistula after operating in the prone position. After an experience similar to the above, no one versed in both methods of operating could fail to appreciate the advantages incident to the prone position in reaching and manipulating the fistulous margins, both in incising them and closing them, it matters not how much verbal quibbling advocates of either may resort to in reference to situation of fistula during operation as contrasted with its position during recovery.

[*To be continued.*]

ELECTRICITY IN UTERINE DISPLACEMENTS AND FLEXIONS.

ANNA K. SCOTT, M. D., CLEVELAND, O.

Previous to the year 1880 I had used electricity quite extensively in the treatment of amenorrhœa, dysmenorrhœa, areolar hyperplasia and other chronic diseases of the uterus. The institution for the treatment of chronic diseases with which I was then connected, had among its patients a large proportion of cases suffering from uterine displacements and flexions. Pessaries of all kinds had been tried, doctors of all schools had been patronized, and quacks without number had palmed off their "Orange Blossoms" and Lydia Pinkham's remedies upon these afflicted women; they had tried standing on their heads, kneeling on the side of the bed and putting their heads on the floor, the knee-chest position and every other position imaginable. But they still dragged

themselves about with doleful countenances, comforting their souls with the oft-repeated assurance of their physician that a woman with a displaced uterus *never was* cured and *never could be* without she wore a pessary, "and I can't wear a pessary for it just drives me wild."

I resolved to try a judicious and careful use of electricity in these cases.

I gave them a thorough electro-massage daily, manipulating each and every relaxed muscle and ligament connected with the pelvic region. I inserted electrodes into the bladder, vagina and rectum, as the case demanded, and thus endeavored to bring back tonicity and muscular contractibility to the relaxed and congested parts. I used both galvanic and faradic currents, according to the nature of the case.

From the experience of the past eight years I have come to have more confidence in the *faradic* current for flexions and displacements than in the *galvanic*. I have been much more successful in curing cases of prolapsus uteri than those of retro-displacement and anterior displacement. I attribute this difference to the fact that I have in the last named displacements to deal with muscles and ligaments which are so in *name* rather than in *fact*. For we know that the utero-vesical and utero-sacral ligaments are almost entirely made up of folds of peritoneum, rather than of real muscular tissue, and hence have not the muscular contractibility and capability of being stimulated that belongs to muscles. When the displacement is due to relaxation of the abdominal muscles and of the pelvic floor, the electrical treatment has been surprisingly effective and permanent.

In flexions of the uterus arising from deficient nutrition of the uterine wall at the point of flexion, I have not found a single case which did not yield to the electric treatment.

Many flexions, however, are the result of inflammatory causes exterior to the uterus, which require a preceding divulsion before the electrical treatment is begun. I have been surprised, however, to find an adhesion gradually loosening and allowing the uterus to be placed almost in its

normal position by the persistent use of the electrical current alone. These cases require time, however, and few patients are willing to give months to their treatment.

During an attack of acute inflammation of any of the pelvic organs I never resort to electricity. In sub-acute cases I have not hesitated to use it, and have never had unfavorable results. But it is in chronic cases that I look for the most satisfactory and permanent benefit.

In conclusion I would add that I by no means consider electricity a universal remedy. The result of years of testing it has served to strengthen my confidence in its efficiency for uterine flexions and displacements, and I no longer look upon these ailments as hopeless.

DIET IN DIABETES MELLITUS.

GEO. L. KAHN, M. D., CLEVELAND, O.

The first rule to be observed consists in the radical suppression of seculent, starchy and sugared foods, so long as these foods are not completely utilized by the system. This the physician can easily find out by the following test: Take two ounces of urine and boil it, after adding one drachm and a half of slacked lime. If the foods are not utilized the urine will become colored.

If the quantity of urine exceeds two quarts a day, the patient must drink as little as possible, avoid soups, bouillon, coffee and tea, but if very thirsty, he can satisfy his thirst by masticating olives, seeds of cocoa or coffee. The pure gluten bread (especially Cormier's gluten) is the only one allowed.

PROHIBITED FOODS.

Bread, pastry, rice, corn, potatoes, arrowroot, tapioca, macaroni, vermicelli, beans, peas, chestnuts, radishes, carrots, fruits of any kind, fresh or dry, sugar, honey, beer and cider.

ALLOWED FOODS.

The nitrated foods are the most convenient. Carbohydrated foods must be taken only in small quantities.

Gluten bread, gluten flour, used in gravy instead of wheat flour, meat of any kind, game, pork, mostly if very fat, mustard, salt, pepper, horse-radish, celery, fish, oysters, crabs, eggs, milk, if it agrees with the patient. Butter and cheese are good alimentary adjuvants.

The vegetables allowed (if well seasoned with oil, butter or lard) are the following: Spinach, lettuce, cabbage, sauerkraut, string-beans, asparagus, celery and mushrooms.

Salads, lettuce, chicory are very refreshing.

Red wine of good quality is favorable, but only in small quantity (a wine-glass at each meal).

EXERCISE.

Hydro-therapy, massage and gymnastics are of first necessity.

When the sugar has entirely disappeared from the urine, the patient must come by degrees only to the common diet. The first bread must be made with Seignette's salt, instead of chloride of sodium. If the sugar should appear again, the patient must be put on the strict diet.

Carnrick's Soluble Food

Is the only Infants' Food manufactured that perfectly nourishes the child without the addition of cow's milk. We do not except the so-called Milk Foods, for they contain but a *very small percentage* of the solid constituents of cow's milk. Most of the credit given to prepared foods belongs to cow's milk, which must be added to them or the child would starve.

Carnrick's Soluble Food is composed of about equal proportions of the solid constituents of cow's milk, partially digested, and wheat flour, the starch of which is converted into dextrose and soluble starch.

Thomas H. Rotch, M.D., Instructor in Diseases of Children, Medical Department of Harvard University, in the *Boston Med. and Surgical Journal*, Sept. 29, 1887, says: "Cow's milk is the universal menstruum of Infant Foods all over the world, and is the *actual food* which the infant is getting; hence it is irrational and unfair to speak of and give the credit to the various artificial foods, when we really should speak of cow's milk, with its modification to a greater or less degree by certain adjuvants under the name of Infant Foods, which all supply about the same variety of ingredients in common; such small amounts of these ingredients as to be of little benefit in nourishing the infant, *and would not nourish it unless aided by cow's milk.*"

CARNRICK'S SOLUBLE FOOD

is positively the only Infants' Food manufactured to which the foregoing criticisms do not apply.

BEEF PEPTONOIDS.

(CONCENTRATED BEEF AND MILK WITH GLUTEN.)

Is the most concentrated and easily digested nutrient that has ever been introduced to the medical profession. Beef Peptonoids in the form of a powder is not a pure peptone, only one-fourth being digested. We are confident that you will find Beef Peptonoids in all cases where you desire a concentrated and easily digested food superior to any preparation in the market, or that can be prepared in the household.

The following are the opinions of most eminent authorities in the world:

Prof. Atfield says of Beef Peptonoids: "It is by far the most nutritious and concentrated Food I have ever met with."

Prof. Stutser says: "When the formation of flesh and blood is to be promoted and vigor infused into a patient, Beef Peptonoids for this purpose stands first and foremost amongst all the preparations I have examined."

LIQUID PEPTONOIDS

Is presented in the form of an elegant Cordial, containing twenty per cent. of spirits. Its nutritive constituents are wholly digested. It will agree with patients who reject all other foods.

Peptonized Cod Liver Oil and Milk

IS SUPERIOR TO OTHER PREPARATIONS OF COD LIVER OIL:

Because the *division of the oil globules is from twenty to one hundred times* finer than any other preparation of Cod Liver Oil ever produced, and consequently brought nearer the condition required for assimilation.

It is predigested, and is, therefore, more easily retained by weak and enfeebled stomachs and eructations are less liable to follow.

Samples sent on application by

REED & CARNRICK, N. Y.

IMPORTANT *New* REMEDIES.

PIL. TERPIN HYDRAT. "W. H. S. & CO." 2 Grains each.

A new and potent remedy in the treatment of coughs, catarrh, bronchitis, and kindred diseases.

Terpin Hydrate is in the form of colorless monoclinic crystals, melting at 100° C., and has the composition $\text{C}_{10}\text{H}_{20}\text{O}_2 - \text{OH}$.

It was first prescribed in France by Lepine, who recommended it as an expectorant, Guelpa took 4 grammes in 12 hours, and Jeannel prescribed 2 grammes per day, for several weeks in succession, without the least sign of intolerance.

Jeannel and See found it useful in Bronchial affections, and Vigier in the same disease recommends it to be taken in pills to the extent of one or two grammes per day.

Dr. Halstead Boyland (*vide "The Medical Record,"* Sept. 24th, 1887,) speaks very enthusiastically of Terpin Hydrate, and after quoting several cases in which it has been exhibited with marked success, thus concludes: "It has proved eminently satisfactory in my hands in every case in which I have used it, and I now prescribe it freely in all Coughs, Colds, and Catarrhal affections, as well as in Bronchial troubles generally, wherever elimination is indicated, and should advise its administration in Asthmatic Dyspnoea in doses of 2 grains every 15 minutes until 10 grains have been taken or relief had been obtained. It has already proven itself of great utility in the treatment of diseases of the respiratory tract, and must be conceded to be a valuable addition to the Pharmacopœia."

We have submitted our Pills of Terpin Hydrate to physicians of eminence, and from all who have had opportunities of trying them the remedy has received their unqualified approval.

In a case of chronic bronchial catarrh, the patient being a very stout lady, the relief was immediate, the cough easier, sleep quite normal, and expectoration free.

PIL. HYDRARGYRUM TANNICUM OXYDULATUM. "W. H. S. & CO."

(MERCURY TANNATE.) 1 GRAIN EACH.

Mercury Tannate was first prepared by Dr. Sigmund Lustgarten in the Pathologic-Chemical Institute of Prof. E. Ludwig, in Vienna.

It is a greyish-green powder, containing at least 40 per cent. of Mercury, and is absorbed by the system with great rapidity due to the fine separation of the Mercury; at the same time it is free from the disagreeable symptoms accompanying the use of other mercurial preparations.

Dr. Lustgarten submitted his experience with Mercury Tannate to the Imperial and Royal Society of Physicians in Vienna, January 4th, 1887, showing that it possessed mild antisyphilitic properties, seldom producing salivation, stomatitis, or diarrhoea, which so often follow the administration of the Chloride, Bi-chloride, Protiodide, and Biniiodide forms of Mercury.

Doctors Shadeck, Leblond, Dornig, Person, Borowski, and Lesser, and Professors Lang and Finger, all write approvingly of Tannate of Mercury.

We have placed the Hydrargyrum Tannicum Oxydulatum in the hands of several eminent physicians, connected with hospitals of New York, for trial, so that a verification might be obtained of the foregoing testimony. From reports already received it seems well worthy of a more extended trial. We now offer it to the medical profession in the form of our soluble pills containing one grain each.

PIL. SALOL. "W. H. S. & CO." 2½ and 5 Grains each.

A new remedy for rheumatism and rheumatic affections, possessing all the advantages of Salicylic Acid and Salicylate of Soda, while not causing any of their objectionable effects.

This valuable remedy was introduced by us to the medical profession several months since, to whom we offered it in pill form in strengths of 2½ and 5 grains to each pill.

"Salol" or "Salicylate of Phenol" was first introduced by Professor Von. Nencki of Berne, and first brought to the attention of the medical profession in a communication by Dr. Sahli to the Medico-Pharmaceutical District Society of Berne, at its meeting held in that city on April 6, 1886.

Salol is composed of 40 per cent. of Phenol (Carbolic Acid) and 60 per cent. Salicylic Acid; a very faint odor of Carbolic Acid is characteristic of pure Salol.

We are now revising our TREATISE on Salol, in which we intend to incorporate the latest experience acquired in the treatment of the several diseases for which Salol is indicated.

This TREATISE will be mailed on application.

W. H. SCHIEFFELIN & Co., 170 & 172 William St., N.Y.

IN PRESCRIBING BE PARTICULAR TO SPECIFY W. H. S. & CO.'S.

The Cleveland Medical Gazette.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY

ONE DOLLAR PER ANNUM IN ADVANCE.

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Original Communications, reports of cases and local news of general medical interest are solicited. All communications should be accompanied by the name of the writer, not necessarily for publication.

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Changes for advertisements must reach us not later than the second week of the month to be corrected in current number, addressed to **W. N. GATES**, Manager Advertising Department, 10 Public Square.

EDITED BY A. R. BAKER AND S. W. KELLEY.

EDITORIAL.

THE NEWSPAPERS AND MEDICAL LEGISLATION.

“The perennial scheme of the doctors to get themselves fenced in and protected from the competition of that class of practitioners that they please to call “irregulars” is up again in the Ohio senate. It comes before every legislature only to be knocked out again, but the doctors never grow discouraged. The bill now pending, known as the Holcomb bill, is the Sinnett bill of the last legislature and has the same objectionable features. The object is to give physicians of certain views the right to say who shall practice medicine in Ohio. The purpose is a selfish one and the principle is all wrong. The legislature should make short work with this bill. It is not needed. Let whosoever can cure disease cure it, whether he belongs to this or that school or no school at all, and since men must die anyhow, it is of

no consequence whether they die in the hands of a physician who is "regular" or one who is not."—*Plain Dealer*, February 6.

It ought to be superfluous to answer such assertions as are here presented. If the public would but consider before judging, the medical profession might in dignified silence let such statements pass.

The pure lives, the unselfish devotion to the best interests of the public, exhibited by the thousands of physicians of this state, regardless of pecuniary compensation, should be a sufficient refutation of the malicious and false insinuation in this editorial from the *Plain Dealer*. Here is evidently implied that it is themselves and not the public that physicians wish to benefit by medical legislation.

Who can find cause to accuse the "regular" physician of seeking his own aggrandizement when he devotes half his time, as most do, to treating patients from whom he knows he will never receive any fee, often, instead, abuse. With what shadow of reason can any assign to the medical profession personal and improper motives in attempting medical legislation, when, governed by the same principles and motives, they organize sanitary conventions, support medical societies and devote much valuable time and thousands of dollars to discover the causes of disease and the best means of prevention. And it is this same motive spirit that gave life and authority to that unwritten law which prevents a member of the "regular" medical profession from patenting any medicine or surgical instrument or appliance, no matter if it is his own invention or discovery. The medical man, when he has discovered some new remedy or some new surgical operation or appliance for the relief of disease or deformity, straightway publishes it in the medical journals and medical books where it will do the public the most good and himself the least good, for then anyone who will may avail himself of this knowledge and take his business out of his hands. Is this selfishness?

Now these and numerous other acts we might cite are of

daily and hourly occurrence. Yet there are people who will insinuate that the medical profession is a mere trade, that it is followed as a mere money-making scheme. Why, if the question of money-making was the only one that animated the medical profession, ninety-nine out of every one hundred would either turn quack or leave the profession within twenty-four hours.

Suppose the medical profession was animated by the same principle as enunciated by the editor of a newspaper who was called to account for an unwarranted reflection upon the regular medical profession: "My dear sir," says he, "it is only a matter of business. These irregular fellows *pay* for advertising and you do not." Now, judged by this standard, every member of the "regular" medical profession is mad, stark mad. Just think of it. Suppose, for instance, a dealer in alcoholic stimulants should be a rank prohibitionist and devote every energy to prevent the consumption of his goods. Would he not be considered mad? Yet his course would be no more inconsistent, from the business standpoint, than that of the physician who, having one case of typhoid fever or diphtheria in a family, takes measures to prevent other members from becoming victims. Yet physicians do this every day of their lives. They spend time and money to prevent people from contracting the very diseases they are paid to cure.

What would be thought, "from a business standpoint," of the man who would refuse to patent his invention, from which he might realize a fortune, and not only refuses to patent it, but takes the trouble and time and money to make his invention known to persons among whom he would expect the sharpest competition in its manufacture. This is what the physician does who publishes his investigations, original or otherwise. But to return to the question of medical legislation, what is it the doctors ask for? It is not for themselves they ask protection. They gratefully acknowledge that in every community there are enough intelligent and appreciative people to keep the educated, the "regular"

physician out of want, in spite of his liberality. And now and again one more intelligent or more appreciative than the rest will exclaim with a distinguished writer of the present day in his estimate of the physician: "He is the flower of our civilization, and when that stage of man is done with and only remembered to be marveled at in history, he will be thought to have shared as little as any in the defects of the period, and most notably exhibited the virtues of the race. *Generosity he had, such as is possible to those who practice an art, never to those who drive a trade.*"

It is not themselves but the public they wish to protect from these abortionists, clap doctors, Christian scientists, impotency men, youths' indiscretionists, and other advertising charlatans. It is the same humanitarian spirit which prompts the physician to save his town or city from the scourge of cholera, small-pox, typhoid fever or diphtheria that leads him to endeavor to save the community from these pestilent quackeries, often more harmful than the cholera or diphtheria. And surely it should be the object of the law to protect the ignorant and weak and restrain the vicious.

In these attempts at medical legislation the medical profession only urges upon the public the necessity of protecting itself by requiring that he who is allowed to practice medicine shall be a gentleman properly educated in the science he professes. Thousands of poor victims had fared better had they been seized in the clutches of small-pox rather than those of the pox doctor.

In the discussion of this subject it is far from our purpose to become personal, yet the assertion that it is a "matter of business" is the true reason which has prevented us these many years from medical legislation in Ohio. Last winter the Sinnott bill passed the senate, and everybody supposed it would pass the house on the first ballot, but the advertising quack doctors were not idle. They made assessments of five hundred dollars each, which was put "where it would do the most good," and we got up one morning to find a universal howl in the newspapers all over the state. The

howl was loud and long. It was a "matter of busines." The bill was killed deader than a door nail. And we presume this editorial is the first whine of the yelping curs, that will continue until all efforts at medical legislation in Columbus have ceased this winter.

THE 'THREE YEARS' GRADED COURSE REQUISITE FOR GRADUATION IN THE MEDICAL DEPARTMENT OF WESTERN RESERVE UNIVERSITY.

The recent action of the trustees and faculty of the medical department of the Western Reserve University in making their three years' graded course obligatory upon all applicants for graduation, is certainly a long step in the right direction, and will meet with the hearty approval of every lover of a higher standard of medical education. This step was taken, no doubt, with a full realization of the difficulties that would be encountered. It is well known that, a few years since, Bellevue Medical College attempted to do the same, and after a three years' trial went back to the old two course system of medical instruction. Of the 117 medical colleges of the United States there are but few, very few, unequivocally requiring three full courses of lectures before graduation. Of these we may mention the medical departments of Yale and Harvard, medical department of University of Pennsylvania, Medico-Chirurgical College of Philadelphia, St. Louis Medical College, medical department of the University of California, and Cooper Medical College of California, and the College of Medicine of the University of Southern California, also the Johns Hopkins University medical department, but this is not yet fully equipped.

Then there are a number which provide courses of three or more years study, and announce the three courses of lectures as required, but so arrange the course or allow equivalents that the three full courses of lectures are not, after all, requisite for graduation. In this class are Howard University, University of Georgetown, and National Medical Col-

lege, at Washington; Medical Department of Niagara University, at Buffalo (organized in 1883); Minneapolis College of Physicians and Surgeons, and St. Paul Medical College, and the St. Louis College of Physicians and Surgeons.

The remaining colleges, over a hundred in number, of all sorts and sizes, present a very varying curriculum, but none of them require—even on paper—more than two courses of lectures. An exception should be made in the case of the Boston University School of Medicine, homœopathic. This school, organized in 1873, and which in 1874 was united with the New England Female Medical College, does announce in its catalogue that three courses will be required.

Even the prolific soil of Kentucky, which has produced so many stalks to a hill—three medical colleges in Louisville alone—has not one requiring three full courses of lectures before graduation. Would it not be better if two of the weaker shoots were cut off that the stronger one might grow up above mediocrity?

It will be seen that between the Alleghanies and the Rocky mountains the medical department of Western Reserve University stands alone and preëminent on this high standard of medical education.

When we come to consider the financial standing of the medical colleges which have practically made obligatory the three years' course, we discover another fact, viz. : that with the exception of the Western Reserve they all have either endowed chairs or state aid. So that this is the first time in the history of the country when a medical college without income for current expenses, except the fees of students, has had the courage to make a three years' graded course a requisite for graduation. We sincerely hope the authorities of the institution may never regret nor retract it, even though it involve serious pecuniary sacrifice.

A school without students cannot be carried on. Doubtless the faculty is assured by the number of students who have voluntarily chosen the graded course that the school will not be entirely without students, but the question is,

will they now come in sufficient numbers to enable the institution to meet its heavy current expenses? It rests with the profession more than with anyone else whether the institution is to be encouraged and maintained upon this higher plane. Let no physician recommend the profession of medicine to any young man who has not the ability, the preliminary education, the moral stamina and the means to thus thoroughly prepare himself to enter the profession. Let all physicians inform their students of the advantages of long and thorough training and advise them to go to college where the required standard is the highest though it does cost more time and study and money. Such a course would enable this and other schools of its class to maintain their stand and redound to immense advantage to the profession as a whole. And we have faith to believe that the profession and especially the Alumni of the Western Reserve—a noble body of physicians and successful practitioners as a rule—will exert their strength in behalf of this pioneer institution of learning.

There is one other source of support which, if its interest could be sufficiently attracted, might establish beyond danger of failure this medical institution of the first class. Some of the most famous medical schools of Europe are under the pay and control of the government, and that is a good, perhaps the best way. But here in Ohio, where we cannot even secure a law regulating the practice of medicine, we may not even hope for government interest in medical education for many long years to come. Those schools of the old world which enjoy the patronage of kings, princes or noblemen could live and teach and prosecute original work and investigation independently of the fees of students. In this country we recognize no noblemen but nature's noblemen, and our princes are merchant princes and our kings are railroad and cattle and oil kings. Now if a few of this kind of noblemen, like Mr. Wood, with princely fortunes, or a few of our American kings of commercial enterprise, were to put out a hand and equip a few departments with apparatus and endow a few professorships and create a few scholarships for worthy poor students in the medical department of Western Reserve

University, that institution would be firmly established upon its high plane and the profession soon realize its ideal of a seat of medical culture.

ALUMNI ASSOCIATION AND COMMENCEMENT EXERCISES OF THE MEDICAL DEPARTMENT OF THE WESTERN RESERVE UNIVERSITY.

The annual meeting of the alumni of the medical department of Western Reserve University was held in the clinical amphitheatre of the college building, Tuesday, March 7.

Dr. Ashmun, president of the association, called the meeting to order, and inasmuch as the recording secretary was absent, the reading of the minutes was postponed.

Dr. Knowlton of Brecksville, the orator, was thereupon introduced, and spoke on the "Proper Relations of Theory to Practice in Medicine." [Dr. Knowlton's paper will be published in the next number of the GAZETTE.] By the time he had concluded, the secretary, Dr. Parker, had arrived, and the minutes of the preceding meeting were read and accepted.

A motion that a committee of seven be appointed by the chair to nominate officers for the ensuing year was carried, and the chair named Drs. J. F. Armstrong, A. R. Baker, T. Clark Miller, E. O. Portman, E. H. Hitchcock, D. B. Smith and W. T. Corlett.

On motion of Dr. Beeman the members of the graduating class of '88 were made members of the Alumni association.

Dr. Sherman of Kent was accorded the floor and said that he had been advised that Drs. John Delamater and Horace A. Ackley, two eminent Cleveland physicians of the last generation, were buried in Erie street cemetery without suitable monuments, and that he desired to present this fact to the attention of the association for consideration. At the suggestion of the chair, and after some general conversation on the subject, Drs. Sherman, Lowman, Thayer, Preston and Kelley were appointed a committee to investigate the matter.

The discussion on "Antiseptics in Midwifery" was taken

part in by Drs. Powell, Bennett, Armstrong, Sherman, Her-
rick and others.

The committee on nominations reported the following
names for

OFFICERS

for the ensuing year: President, Dr. E. O. Portman of
Canton; vice-presidents, B. W. Holliday, Cleveland; B.
B. Loughhead, Ravenna; A. M. Sherman, Kent; P. Pease,
Massillon; R. A. Walker, Monterey, Pa.; recording secretary,
W. T. Corlett of Cleveland; corresponding secretary, S. W.
Kelley of Cleveland; orator, H. K. Cushing of Cleveland;
alternate, N. S. Everhard, Wadsworth.

It was suggested that the discussion, hitherto an order of
business, be hereafter dispensed with, and the time used in
short speeches by the different alumni.

The annual poem was read by Dr. L. S. Ebright of Akron,
entitled "The Good Physician." It was quite a success and
elicited hearty applause.

Dr. Parker then read the subjoined communication from
the faculty to the alumni:

TO THE ALUMNI ASSOCIATION :

The faculty take pleasure in welcoming so many of you back to the *alma mater*
and in being able to receive you in such splendid surroundings. That you may have
more definite knowledge of the workings of the college and thus an increased interest
in its future success, the following report is offered: Total number of students pres-
ent, 133; seniors, 54; juniors, 79; candidates for graduation, 44, ten seniors having
failed or only partially completed the examination. Though our numbers this year were
slightly less than last, this is probably owing to an increase in the fee for the general
ticket and to the establishment of a new school at Pittsburgh, which has had a noticea-
ble influence upon the number of students from Pennsylvania. On the other hand the
session just closed has been one of the most prosperous and satisfactory. This is
largely due to the splendid accommodation in the new building and the perfect
heating and ventilation as well as its adaptability to all the requirements for medical
instruction. The teaching has been modified to the decided advantage of the student
in many departments, recitations, demonstrations and experiment taking a place in
many departments. The accommodations for the study of anatomy are unsurpassed.
The dissecting room is large and well lighted and supplied with every convenience.
The preparation rooms and "cooler," where subjects may be preserved any length of
time, insures an abundant supply of material at all seasons of the year. For the first
time in the history of this college can we announce a physiological laboratory fur-
nished with microscopes and necessary apparatus for pursuing the study of microscopy
and histology. A special instructor has been appointed to take entire charge of this
department. The money expended was generously donated by Mr. John Huntington
of this city. The handsome sum of \$3,000 was also given by Mr. John A. Vincent, the

income of which goes to the support of the department of pathology. By the aid of this sum, together with the generous outlay of private funds by the professor of pathology, the department of pathology and morbid anatomy has been furnished with microscopes, tables, instruments and apparatus necessary to successfully teach this important subject. Much remains, however, to be desired. In the chemical laboratory nothing has been done owing to want of means. The tables are in place and all that is wanting is apparatus and reagents. The faculty trust that some friend or friends of the institution will soon come forward and furnish this most needed department. The dispensary and daily clinic has become an important and recognized feature of the college instruction. Though established less than a year, over fifteen hundred patients have made a first visit, with a total of over six thousand prescriptions. Here the student receives practical instruction in the examination and treatment of disease, in the use of the stethoscope, laryngoscope and ophthalmoscope (for which a special dark room has been constructed) and speculum; students also have opportunity in assisting in the preparation and dispensing of the remedies prescribed in the various departments. While thus furnishing most valued practical instruction to the student, the daily clinic has greatly added to the number of patients and the interest of the general clinics (in medicine and surgery). With some misgivings, but acting upon the sentiments of the alumni as so often expressed in these meetings, the faculty has unanimously announced a graded course of three years as obligatory upon all students entering the college with the winter session of 1888-9. To make this department successful we bespeak your co-operation and assistance. The increased demands made upon the practitioner of to-day, the ever widening field of medical knowledge and the demand for more practical knowledge in the modern physiology all necessitate a lengthened stay in the medical college. Such knowledge cannot be attained from didactic lectures, but must be acquired in the dissecting room, in the laboratory, in the clinic and at the bedside. But this instruction requires more time, and it is to give just such advantages the faculty have lengthened the course of study. The faculty have no doubt that they are subserving the very best interests of the students, professors and public in thus lengthening the course of study, and are confident that with the hearty support of the large body of alumni scattered all over this country in the successful practice of medicine that they will have no cause to regret the stand they have taken upon this important subject. We cannot go faster than you lead. It is to you we must ever look for our support and patronage. Nor do we suspect, at the opening of this new era in the prosperous history of this old college, that her sons will desert or prove untrue to their *alma mater*.

Dr. Powell, registrar, begged leave to add the following correction: Number of matriculates, 136 instead of 133, and to state that every student has now opportunity to attend cases of obstetrics.

On motion, the communication of the faculty was accepted and approved as the sentiment of the alumni.

A general discussion ensued on topics suggested by the report of the faculty, and especially as to there being no money on hand to equip the chemical laboratory. Dr. Powell explained, lest some should think that the faculty had funds at hand which it was unwilling to put into the laboratory, that the fact of the department being carried on

in the new building increased the expense of the faculty two thousand dollars per annum.

On motion of Dr. A. R. Baker, a committee of five was appointed by the chair to confer with a similar committee of the faculty to devise some means to raise ten thousand dollars necessary to fit up the chemical laboratory with apparatus, reagents, etc. The chair appointed the following committee: Drs. A. R. Baker of Cleveland, O.; J. W. Shively of Kent; P. H. Sawyer of Cleveland; T. C. Miller of Massillon; A. M. Sherman of Kent.

After a general discussion as to the best plan of the notifying and registering alumni, the meeting adjourned.

COMMENCEMENT EXERCISES

of the graduating class of '88 of the medical department of Western Reserve university were held Thursday evening, March 7. The main amphitheatre of the college building was crowded to overflowing. Shortly after eight o'clock the Germania orchestra began playing a selection from Lohengrin and the graduates entered and took their places. The class officers are: Walker W. McConnell, M. D., president; Frances E. Tibbitts, vice-president; Moses L. Allen, secretary; Robert M. Eames, treasurer. The following is a complete list of the graduates: J. W. Abercrombie, M. L. Allen, S. O. Barkhurst, N. J. Bigley, R. A. Biechele, F. G. Blanchard, H. E. Blatt, G. R. Bull, T. A. Burke, A. B., A. H. Cartright, S. A. Cleveland, A. L. Cope, R. M. Eames, G. E. French, F. L. Henry, F. W. Herbkersman, G. W. Hine, F. X. Hoerstman, J. C. Hoye, R. A. Kennedy, G. C. Lathrop, W. R. Legron, William Leonard, D. H. Lewis, W. P. Megrail, L. B. Miller, E. D. Moore, G. H. Mott, E. M. McConnell, W. W. McConnell, S. R. McCreedy, J. A. McMurray, B. P. Paddock, F. E. Perry, W. A. Phillips, J. R. Pipes, C. H. Porter, C. W. Power, C. H. Quayle, B. S., C. E. Stewart, J. E. Thompson, F. E. Tibbitts, W. S. Weiss, H. E. Whitsey, C. A. Witherstay.

THE OPENING ADDRESS

was made by Professor G. C. E. Weber, dean of the faculty. During his remarks he said: "It may not be out of place

for me to make a few remarks relative to the present condition and prospects of the medical department of Western Reserve University. The trustees have secured a new president, and his every official act is done with a spirit of energy and love for the work undertaken. With the agility and skill of an old mariner he has climbed to the mast-head, and nailed the flag of the university, saying that it shall stay there until it waves over all of our broad land. He takes a lively interest in the profession at large and this medical department especially, and I am sure that we have a warm friend in President Haydn. Then we have this grand building, given by a kind friend, but we want more, in order to have grander opportunities to teach our noble profession. Mr. Hurlbut gave us \$10,000 for a medical dispensary, and although it has been in operation less than a year, fifteen hundred people, sick and poor, have applied for treatment and nearly six thousand prescriptions were filled. Mr. Vincent gave the medical department \$3,000 for the equipment of the pathological department, and Mr. John Huntington gave a handsome sum for the equipment of the physiological department. The most important thing which we have done is to make a change in the curriculum of study. We have adopted a graded course of three years of study. This is in advance of any institution in the west. There is no medical institution in the west that requires a three years' course, and one in New York which tried it was obliged to abandon the enterprise. We must have the support of the alumni. Let them discourage young men who have not a fundamental education from seeking to enter the medical profession. We will be satisfied with a less number, if necessary, but we want to send out young men acquainted with the arduous duties of our profession. The three years' course will allow special studies, and we hope soon to have special teachers.

We can sincerely feel proud of our institution, but, as I am in the eve of my services, I may not see the unfolding of the glories of the future.

Gentlemen of the graduating class, you have done your duty well ; you have been examined and are about to re-

ceive your diplomas, having long enough lingered at the portals. You must now begin the practice of medicine within the temple of Esculapius, and you must seek success by self-denials and devotion to study. I might talk to you of the trials of the physician, but this is not the proper time. I might discourage you and mar the joy of this occasion. When you return home shake hands with 'dad,' kiss your mother and sister, and perhaps your sweetheart. Then go to your chamber and think for a location. Do not look about for some doctor to die, in order to get his practice, but seek some hamlet or large city and see if the community suits your taste. Look to this and nothing else. Do not look up a community where there is plenty of sickness, for that may prove to be a two-edged sword. When you have selected your place, hang out your shingle and go to work. Stay in your office and make some special branch your continual study and object in life. You will find time also to keep well abreast with the progress of the profession in general. Do not sit around on the store boxes for sociability, and do not join church unless the spirit moves you. The next thing to do is to get a wife, but do not tell her about your patients or you will get into trouble. I made that agreement with my wife thirty-four years ago, and she has lived up to it ever since. Your instincts as gentlemen will enable you to conduct yourselves properly with your patients at all times, and be especially careful of your conduct toward your professional brethren. Your *alma mater* will always be proud to call you her beloved sons. Whatever your success may be in city or hamlet, let me say in parting that the loving eyes of your teachers will follow you wherever you go, and kind hands will go out to greet and sustain you."

THE ANNUAL ADDRESS

was delivered by Major F. H. Braggins of Cleveland, O. It was most entertaining in matter and manner, but space forbids an extended account at this time.

Rev. Dr. H. C. Haydn then presented diplomas and con-

ferred the degree of doctor of medicine upon the gentlemen whose names are given above.

The valedictory was very ably delivered by Thomas A. Burke, and after the benediction by the Rev. Dr. Haydn, the audience was dismissed.

The banquet, complimentary to the alumni, was given this year at the college building, the students' reading room affording ample space to seat two hundred guests.

Altogether the alumni meeting and commencement exercises of this year were considered the most successful, enthusiastic and enjoyable within the memory of anyone present.

A FILTHY HABIT.

Now that the warm days of spring have come the filthy habit of covering the beautiful lawns of our city with manure is being indulged in with more than usual activity. If those immediately interested were the only sufferers from the intolerable stench, they might be left to their own reward, but neighbors and even everyone passing along the street is obliged to have his nostrils offended and his health endangered, especially when the offenders are not satisfied to use manure from the stable alone, but mix it with human excrement, as is not infrequently done. It is an old adage that where there is so much smoke there must be some fire, and it may be with equal truthfulness said that where there is so much stench there must be some danger. Is not this a question deserving the thoughtful consideration of health officers?

But even aside from a sanitary stand-point, there is no occasion to continue this disgusting habit. The lawns can be benefited just as much by sprinkling them with ammonia water or with lime or some of the phosphate preparations. If protection is necessary, nice clean straw would answer every purpose, and this intolerable nuisance be abated.

NOTES AND COMMENTS.

Read Medical Journals.—I secured a very important case, many years ago, and through this one case a number of others were brought to me. I never knew until months afterwards how I happened to be selected. It was in this way: One night, at quite a late hour, I was called to see the family of a prominent New Hampshire official, temporarily staying in our town, to whom I was a perfect stranger. After I had discharged myself, and quite a while afterwards, I learned that as soon as this gentlemen found that he required a physician, instead of asking the landlord of his hotel, or appealing to some drug store for the name of a doctor, he took a carriage and drove to the house of a postmaster. "I want a doctor," said he. "Tell me which one of the doctors of this city takes the largest number of journals." The postmaster referred him to me. As the gentleman was leaving the house he said to the postmaster: "A man who takes the journals of his profession is well read and up with the time, and that is the doctor I want to treat me and my family."—*T. L. Brown in the Medical Advance.*

Pharmaceutical Substitution.—A short time ago, a German association set itself the task of *proving* that the German pharmacists habitually *substituted* one ingredient for another when not in stock. Bogus prescriptions were, therefore, prepared containing unknown and absurd articles. One prescription read:

R Aconit. Nap.
Tuber Cinereum.

Notwithstanding the fact that "Tuber Cinereum" is the "*tubercle of gray substance at the base of the human brain,*" this article with aconite was actually dispensed and paid for in *fifty-eight* Berlin pharmacies. Other fancy ingredients,

such as *Urticaria Rubra*, *pemphigus foliaceus*, etc., etc., were dispensed in *seventy-seven* pharmacies; only twelve refused them. When the hoax was complete, the whole bundle of prescriptions, together with the compounds dispensed, were submitted to the editors of the journals. The organs of German pharmacy admit the truth of the charge. The Berlin Pharmaceutical Society, at their last meeting, *discreetly* resolved to take no notice of the matter. *The boasted superiority of German Pharmacists would seem to have received a shock by these revelations.*—*Buffalo Medical Journal.*

Subscribers will please remember to notify us of any change in their address. The best time to send the notification is at the time the change is made.

Edmund Owen aptly terms convulsions “the rigors of childhood.”

Let one among the hundreds of aspiring young gynecologists of our country discover a method of curing in a short space of time chronic vaginitis of gonorrheal origin, with its complications, and he will win for his name immortal fame.

“*Some surgeons*, fond of investing even the simplest operations with a certain air of display or dramatic effect, introduce the catheter with its convexity upward, and when the penile portion is passed, suddenly impart to the instrument a graceful twirl, by which the curves are reversed, and the handle, after describing a semicircle, sinks down between the thighs. This is the *tour de maître* of the French. I doubt very much the propriety of making a brother man a stage on which to enact a surgical flourish.”—*Agnew.*

It would be impossible to calculate how many thousands of lives have been sacrificed to the low bodice, or how many cases of life-long loss of energy and spirits might be traced to its debilitating effects, more especially on young married women and their children. If doctors would but speak out and condemn it, as they most certainly would were it a new fashion just introduced, a fresh and strong impulse would be given to the tendency that already exists in the direction of the high bodice, and the low cut would soon be left entirely to far different circles of society, where it is adopted in its most flagrant form for reasons which M. Zola has sufficiently indicated.—*Town Topics.*

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ADJUSTABLE LACING

SOCKET LIMBS,

THE MOST COMFORTABLE AND
DURABLE LIMB, AND THE
NEAREST APPROACH TO
THE NATURAL MEM-
BER OF ANY IN-
VENTION OF
THE AGE.



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The barrel is of metal, formed by a process securing uniformity of caliber, without soldered joint or seam. It is plated inside and out with nickel. The piston is packed in the double parachute form, with leather prepared for the purpose. It retains its elasticity, operates smoothly, resists all tendency of fluid to pass above as of air below it. An engraved scale upon the piston-rod indicates minims, thirty being its capacity. It has two needles of refined steel, carefully tempered.

Price, \$3.33, less 25 per cent. to physicians, or net \$2.50. Postage, 3 cents.

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Notes and Comments.

The varieties of teas produced by long cultivation were formerly regarded as distinct species and described as *Thea bohea*, *T. viridis*, *T. stricta*, *T. chinensis* and *T. assamica*, but aside from flavor there is more difference produced in the mode of preserving and marketing than in the original varieties. The great desideratum is a *pure* article well preserved. This can be had, in all the varieties, of the Great Atlantic and Pacific Tea Co. at any of their stores.

Practice and Home for Sale.—In one of the most pleasant villages in northern Ohio, ten miles from Cleveland. Practice of twenty-one years standing, and for nineteen years has never paid less than \$3,000 a year. House and barn built by owner in 1880—all new. Office of two rooms in house. Barn, room for six horses and four carriages. The property has cost fully \$4,000. There are twelve hundred people in the township and no other doctor. This property and the business offered for \$3,500. Here is a rare chance for anyone desiring a country practice. Inquire of F. N. Wilcox, Esq., Wick Block, Cleveland, Ohio.

We have before us a neat, cloth bound volume of 61 pages on the "Efficacy of Coca Erythroxylin." This book will be sent free, on request, to any of our readers. Address Mariani & Co., 127 Fifth avenue. See advertisement on page opposite first cover.

The old and reliable firm of W. H. Schieffelin & Co., have added to their list, pills of *salol*, $2\frac{1}{2}$ and five grains each. This is the new rheumatic remedy which has recently attracted so much attention.

We have tried many makes of pills and supposed that it would be impossible to devise anything new in this direction, but Upjohn's have succeeded. We predict that the name Upjohn will soon be a familiar one with the profession.

Our grandfathers used to cure the headache by kissing a pretty girl. Some of these old-time remedies are difficult to improve on.—*Exchange*.

Any of our readers who may have occasion to visit Cleveland will do well to call upon E. M. Hessler, 68 Public Square, and examine his large stock of surgical instruments and appliances, which is the largest outside the eastern cities.

4. The malignant parts show small, yellowish white, glistening, raised points, at least in certain places.

The question of antiseptics may be fairly stated as follows: *It is the practice of the majority to disinfect the hands with a 1-1,000 solution of corrosive sublimate; external genitals, 1-2,000; vagina or uterine cavity, 1-4,000. The vagina and especially uterine cavity are washed only on the strongest indications either just after birth or during confinement to bed. The amount used for the irrigation of these cavities is about two litres. In post-partum hemorrhage of the uterus from atony, a solution of 1-3,000 is used. The sublimate solution is considered as contra-indicated in women suffering from anæmia, phthisis, general cachexia, or diseases of the kidney or digestive organs. Also those having extensive wounds of the vulva or taking mercurial preparations. It is found that vaginal or intra-uterine irrigation is frequently followed by absorption of the injected liquid, especially if its escape be in any way impeded. Mercury can be quickly detected in the fæces when this occurs. The solution 1-1,000 is only injected into the uterus in severe cases, as putrefaction of the fetus in the uterine cavity, tympanites of the uterus, or septic puerperal fever. Not more than a minute's time is allowed for the injection, which is followed by copious injections of distilled water. In cases where there has been an expulsion of the macerated fetus, a solution of 4-1,000 is used. This is also employed in the endometritis, consecutive on the expulsion of the fetus in premature delivery. This solution is of service in puerperal endometritis accompanied by fetid vaginal discharge, and should be followed by copious injections of water. Carbolic acid is in general use for the disinfection of instruments.*

Angerer of Munich has claimed that the sublimate solution may be rendered permanent in ordinary distilled water by adding to the water as much, by weight, of common salt as there is present corrosive sublimate.

The following are the rules for the physicians who wish to visit the laparotomies, which are performed in the clinic of Olshausen: 1. On the day of the operation not to come in

contact with infectious material of any kind. 2. To come to the operation freshly bathed and in clean linen clothes which have not been worn in the sick-room. 3. To touch no instruments, sponges or anything which is used in the operation. 4. To be there promptly at the appointed hour, as at the beginning of the operation the doors will be closed. Such were the rules of Schroeder, which are now carried out by Olshausen and Martin. Gusserow is not quite so strict with his visitors.

The question is often asked, how soon is a physician justified in attending a case of labor after coming in contact with septic material? In Vienna the reply is, as soon as you have time to change your clothes and go through a thorough washing with antiseptic solutions of a reliable character. In the first clinic, Carl Braun's, in the Allgemeine Krankenhaus in Vienna, the assistant has charge of the wards, and conducts personally all complicated cases. At the same time he is constantly giving instruction on the cadaver to the students and practitioners taking operative courses. He is often summoned from the operating table in the pathological building to make a forceps delivery. He would remove his coat and proceed to a most careful washing of the hands and arms. He not only washes them but he scrubs them, and scrubs them well; then dips them into a solution of permanganate of potassium, and next into a solution of muriatic acid. In the second clinic, the hands are cleansed by a powder consisting of ground kernels and shells of bitter almonds. This powder seems to possess very great cleansing and absorptive powers.

The conservative Cæsarean section of Säger is a method which is rapidly gaining ground. From all parts of Germany come favorable and constantly improving reports. This continued and increasing success is very gratifying to those who confidently expect this operation to ultimately displace craniotomy in most cases. Leopold, whose statistics are as favorable probably as those of anyone, recommends complete closure of the abdominal cavity by the continued suture after the protrusion of the uterus. He con-

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ORIGINAL ARTICLES.

THE PROPER RELATION OF THEORY TO PRACTICE IN MEDICINE.*

BY W. A. KNOWLTON, BRECKSVILLE, O.

I would ask your attention for a short time to a subject old and yet new, forever recurring, a subject of great interest and importance to general practitioners. We will name it "The proper relation of theory to practice in medicine." It is a big theme and I can only hope to beat about its margins a little, and trust that I approach it with becoming modesty.

The thinking mind associates result with cause, it strives through fact to find a principle, it seeks a law; hence generalization is a constant attendant on higher mental operations. So true is this that, in the absence of knowledge, hypothesis is made to serve for truth and processes imagined to accommodate observed phenomena. This demand for the why and the how, the reason of things, is the prolific source of theories in medicine. The path of medical progress is strewn

* An address delivered to the Alumni of the Medical Department of Western Reserve University, March 7, 1888.

with the wrecks of theories. They rise, and have their day, and fail, and the day of their downfall is, as a rule, a more hopeful day for medicine, a day of revival of true clinical and experimental methods. A study of the theories, some absurd to a degree, some plausible and brilliant, which in the past, at various times, have reigned in medicine, is full of lessons of wisdom to practitioners of to-day. A new discovery, a few before unrecorded observations, are quite sufficient to send numbers of medical philosophers ranging at large over the whole field of pathology and therapeutics, and some genius more brilliant or plausible than the rest presents the medical world with a new theory of disease, a new system of treatment. With the positive knowledge gained in the study of anatomy, physiology, histology, chemistry and pathological anatomy, combined with fuller knowledge of the natural history of disease and of the physiological action of remedies, physicians of the last quarter of a century have had high hopes that the reign of theory or dogma in medicine was at an end. The signs of the times would indicate that this conclusion was hasty. The methods of observation and of verification, the true experimental methods, are too slow, too plodding. True scientific methods have not extinguished the passion for generalization. Bounding to the conclusion that bacteriology and pathology are one, not a few, and some of the most brilliant minds in the fraternity, have become affected with a kind of germicide rage, a bacterio-mania.

The average practitioner of medicine who has neither the skill, facilities nor time for thorough bacteriological work, feels the ground unsteady under his feet. He is in danger of losing his bearings. His duty is to the sick, to relieve suffering, to save life. The new teaching as to the cause of disease bears powerfully on the treatment of the diseased—perhaps I should say on the treatment of the disease. Our ancestors—and some savage tribes at the present day do the same—regarded disease in an individual as a demon to be exorcised, driven out. The latest teaching is that disease is the invasion of the body by countless myriads of little

demons to be attacked directly with the most approved implements of warfare. If this teaching, both as to cause and treatment, should prove sound, we see in the notion of the savage a large "germ" of truth, an evidence of instinctive or intuitive knowledge. Enthusiastic disciples of the new doctrines do not hesitate to declare that we have not only a new pathology but a new therapeutics; that the remedies for disease are to be found among germicides, and that the search for specifics shall be renewed with greater zeal. That I do not exaggerate, current medical literature amply shows; besides, one somewhat prominent American teacher asserts in substance that he who does not believe it proven that all communicable diseases are caused by living organisms is too ignorant or too stupid to be a physician; and another American teacher of world-wide reputation declares with quasi-approbation that "Indeed, already now 'Death to Bacteria' is the rallying cry of many of the eager workers in curative as well as preventive medicine." It is evident that newly discovered facts as to the connection of micro-organisms with certain diseases, and the much larger body of dogmas almost furiously urged by members of the new school, are likely to seriously affect the treatment of the sick, and this brings us face to face with the old and yet new question of "The proper relation of theory to practice."

As a matter of fact, no intelligent physician ever practiced his art without some theory as to the nature of disease, some notion as to the *modus operandi* of his remedies. Even the ancient school of Empirics, whatever their professions, in all likelihood did not go so far as this in empiricism. But the question whether the physicians of any age or time were safe and progressive practitioners turns upon the inquiry whether their theories dominated their practice, or their facts dominated their theories; whether they were chiefly theorists or observers; whether humble students of nature or ambitious visionaries.

The erection of theories upon imperfect and inadequate foundations, a too hasty and premature generalization, has ever been the bane of medical progress. By medical progress

is meant improved means and methods of treatment which lessen mortality from disease. This definition may not suit some who claim to be truly scientific in practice, but it ought to satisfy the ordinary practitioner.

What are the facts, as they present themselves to the busy practitioner, on which is built the vast structure of bacterio-pathology and proposed therapeutics? It seems to be proven that certain specific forms of micro-organisms are constantly present in a few diseases. Experiments upon animals appear to show that these micro-organisms stand in a causative relation to the diseases. Micro-organisms are sometimes seen within white blood-corpuscles. The researches of Cohnheim and others appear to show that pus corpuscles are dead white blood-corpuscles. It is claimed that micro-organisms are always found in pus.

From these data, what are the generalizations which we are asked to accept?

That all infectious and contagious diseases are caused by specific organisms. That malarial diseases generally have a similar origin. That chronic diseases, in which there are low-lived, early degenerating formations, such as carcinoma, lupus, syphilis, tuberculosis, in short, the granulomata generally are caused by specific germs. That suppurative inflammation always and acute inflammations generally are caused by infectious microbes. Further, we are asked to accept certain conceptions of pathological processes. Acute inflammation being the result of microbic infection, the phenomena attending it are those of a battle between microbes and white blood-corpuscles, a furious contest between the army of invasion and the army of defense. The significance of the word inflammation is changed. Swelling, heat, tenderness, following a traumatism, as for instance a simple fracture, are not the phenomena of inflammation but of physiological repair; but swelling, heat, tenderness, terminating in suppuration or occurring otherwise than from traumatism are evidences of inflammation—a distinction which might at times render it difficult to make a differential diagnosis.

Finally, the direct aim of therapeutics is to destroy the germs.

The argument is simple: Disease is caused by germs, ergo, kill the germs.

Now, if it be proven that a few infectious diseases are caused by micro-organisms, it is not an illogical conclusion, perhaps, that all zymotic diseases and some forms of inflammation are similarly caused. With the notion that they are so caused, or with the expectation that it will be so proven, the practical physician need have no quarrel. It is a question to be determined by actual investigation. But the views of pathological processes and of therapeutic expectation, above referred to, the practitioner may well hesitate to accept.

Why should even proof that diseases are caused by living germs materially change our views of pathological processes or of therapeutics? The idea that disease is caused by a poison received from without is not new. Does the discovery that the poison is a living germ, instead of a chemical compound, simplify or greatly change the pathological and therapeutic problem?

Are not the noxious effects of microbes in the tissues and blood brought about by chemical changes which they effect, and by interference with vital processes in the same way that a chemical poison is supposed to operate? Does not all bacteriological investigation go to show that the great function of micro-organisms is to effect chemical changes? Is it not already believed by bacteriologists that all putrefaction, that decay and decomposition of organized tissues, whether of animal or vegetable origin, is effected through the agency of bacteria? Evidence accumulates that in essential fevers, especially in typhoid fever, poisonous chemical compounds, toxic ptomaines, secreted by or formed through the agency of microbes, produce the most prominent symptoms of the disease. It would seem clear that microbes are noxious through chemical changes which they effect, or by acting as mechanical irritants, and the weight of evidence is overwhelmingly in favor of the former supposition; but in what-

ever way they act, it is plain that morbid processes must be investigated, as heretofore, by microscopical examination of the tissues and their elements and by chemical analysis.

The discovery of the causative relation of living germs to disease does not then give us a new pathology, but a basis perhaps for a sounder pathology. It is but one of the elements in the problem of disease, but an important one beyond question, for it affords a fixed starting point and offers valuable hints as to the direction in which investigation will prove most profitable.

Now as to the new therapeutics; is there anything in all clinical experience to indicate that the "rallying cry of death to bacteria in curative medicine" is likely to lead to more rational and successful treatment of the sick? The brilliant results in antiseptic surgery and midwifery have no bearing on the question. Antiseptic methods in surgery and midwifery are branches of preventive medicine, cheering, glorious, in their results. They deal with germs outside the tissues and the blood. Their aim is exclusion. The results they give form part of the solid foundations of sanitary science. They teach above all things the immense importance of a scrupulous application of the gospel of cleanliness. They may also teach that there are pathogenic germs, the exclusion of which will prevent disease, but they afford no indication for the treatment of those whose blood and tissues are infected. Will not a substance that, when introduced into the system, will kill a bacillus in the blood or tissues, also kill or injure a white blood-corpuscle? The one may be more highly organized than the other, but will not both suffer? What one of the germicides, proved in the laboratory, will abort an essential fever? Quinine is the nearest approach to a specific of all our internal remedies, but does quinine cure an ague by directly poisoning malarial germs? Such an assumption is unfounded. Quinine beyond question is antiseptic, but compare its germicide power with that of many other substances. If the specific action of quinine were not known, would its known antiseptic properties lead to its use in malarial disease to the neglect of other and far more pow-

erful germicides? What believer in antiseptic surgery would trust as confidently to quinine as to carbolic acid or corrosive sublimate? Why are not these substances the best remedies for malarial disease? Alcohol is a potent antiseptic, yet it is daily demonstrated that alcohol in heroic doses is not a specific for malarial disorders.

There are vast differences between external and internal medication. If the bacillus of Klebs or the plasmodium malariae of Lavarán, one or both, prove to be malarial germs, and if they are cultivated in the laboratory, are we not sure that mercuric bichloride or biniodide will destroy their vitality far more promptly and certainly than quinine when tested in the laboratory? Does it not tax one's credulity to believe that ten or twenty grains of quinine diffused through the blood of an adult will directly poison pathogenic germs therein? If, then, the quinine causes the plasmodium to disappear from the blood, how does it operate? The answer would seem to be, indirectly, either through chemical reactions set on foot in the blood or by increasing the functional activity of organs, in short, through its physiological action. Because we do not fully know the physiological action of quinine, it is a lame conclusion to say that it kills the germs directly, and one that is not likely to lead to improvement in therapeutics.

Let us suppose a nervous fluid resembling electricity. Experiments go to show that the cellular elements of the blood can withstand electrical currents of sufficient strength to kill bacteria. Let us imagine quinine as stimulating certain cellular elements in the brain, the chief generator of the nervous fluid. May not nervous fluid in increased quantities flow along the nerves to all parts of the system permeating the blood and thus destroy malarial germs? This is not seriously offered as an explanation of the *methodus medendi* of quinine in malarial disease. It may be called fanciful, even foolish, but to my mind it is quite as plausible and rational as the theory that quinine cures ague or lowers temperature in any zymotic disease through its direct germicide power.

The discovery of pathogenic germs has not placed practical medicine on a mathematically scientific basis. The occupation of the theorist is not yet gone.

Let us for a moment consider the pathological conception (the expression is not used inadvertently) that an acute inflammation, say acute pneumonitis, is essentially a conflict between invading germs and the leucocytes of the blood, in its relations to treatment. Accepting this view, should not the processes going on in the inflamed lung, so far as they depend on the action of the nervous and circulatory systems, be regarded as physiological defense? as processes no more to be interfered with than those for repairing a broken bone? Would not interference be inconsiderate meddling? To attack the invader might injure the defender; to call off the defensive forces by depletion, by arterial and nervous sedatives, would open the way for further invasion. And yet, what physician does not know that there are cases of pneumonitis that would be benefited by blood-letting at the onset; that there are other cases, and not a few, in which the disease may be most favorably modified by the early use of depressants, such as aconite, veratrum viride, tartrated antimony, etc.? Again, if the tissues at any point have become infected with pyogenic bacteria, how can depressing measures prevent suppuration? And yet what surgeon does not believe that he has prevented suppuration by measures to relieve congestion, to call or drive the blood away from the affected part?

The experience of centuries is not to be whistled down the wind because rods and spheres are seen under the lens. Theories designed to explain practical facts are generally harmless, and are a great comfort to the knowledge-hungry doctor, but theories which determine practice are fraught with danger.

Dr. Sangrado was a great theorist and followed his theories strictly in his practice. We are told that he was one of the most learned men in all Valladolid and had a great following. Here lies the danger. The theorist, through strength of intellect, vivid imagination and brilliancy of

statement and expression, makes willing captives and rules as an autocrat.

When Dr. Sangrado's pupil, in view of the distressing mortality, suggested a change of treatment, the doctor admitted the force of the argument, but alas! he had published! an insuperable objection. The times have greatly changed since the author of 'Gil Blas' wrote, and it would be ungenerous, perhaps unjust, to suppose that *now* such an objection would bar the way to a modification of views or of practice, and yet, even to-day, an author's pet theory, the child of his brain, is dear to his heart, and possibly may warp his judgment.

No physician can fail to recognize the vast importance of the discoveries of Pasteur and Koch and their co-workers, and of the lessons of antiseptic surgery as taught by Lister and his followers; but while the practitioner of medicine may well bow in proud and grateful homage before the genius of these great men, he should not permit his enthusiasm to blind him to the limits of actual knowledge to which their discoveries have carried us. The expectation that the discovery of living pathogenic germs will result in a speedy and beneficent revolution in medical practice, so that remedies may be applied with scientific precision, is not likely to be realized. Past experience would indicate that the number of specifics will not soon be greatly enlarged. The most promising fields of investigation would seem to be the continued study of pathological conditions and processes; the action of micro-organisms in the tissues and blood, and their immediate and remote effects; the conditions which render the individual vulnerable, susceptible to the toxic effects of microbes; nature's methods of defending the most highly organized beings against the lowest, and following, or, if possible, improving upon her methods; extraneous conditions which affect the multiplication and activity of pathogenic germs and the determination of the question whether they are essentially pathogenic, or virulent conditions of otherwise harmless organisms; the physiological action of remedies, and their chemical reactions in the tissues and in the

blood, in health and in disease. It would seem probable that here lies the largest hope of therapeutics. He who unravels the mystery of the modification of function and the chemical changes effected by a single internal remedy which approaches specificity in its action, will have made a discovery worthy of the highest place among the glorious discoveries in medicine.

From patient, earnest workers in all these departments of medical science, the practitioner may look for help in the future. Curative medicine lags far behind surgery, and yet the outlook is cheering. It is not that medicine moves so slowly, but that surgery goes so fast. Antiseptic surgery is full of suggestion to the general practitioner. Further blood poisoning in many diseases may be prevented by disinfection of the mouth, nasal passages, throat, bronchi, all mucous membranes within reach, possibly, to a limited extent, the entire alimentary canal. Several new remedies of undoubted usefulness and power have lately been added to the list. More is learned from year to year of the physiological action of remedies and of the various ways in which disease destroys life. It is safe to say that practitioners of to-day do less harm and more good than those of fifty years ago. The increased average length of life is not all owing to sanitary science and antiseptic surgery.

But notwithstanding great modern discoveries, it seems very probable that for a long time to come, in the vast majority of diseases, physicians must be content to treat conditions and not the disease. In the words of a great teacher, their chief usefulness will be manifested in doing all they can to "obviate the tendency to death." But physicians need not feel humiliated because they cannot explain everything. The mysteries of life and death are great, some of them past finding out. If we heal the sick we are scientific workers, even though we do not know how our remedies operate. What is science but a recognition and classification of facts? A perfect classification is only possible to omniscience, because it requires a perception of the true relation of facts. The mind engaged in classifying works upon a higher plane than

the mind employed in simple observation, but he who recognizes a fact, and proves it truth by verification, and practically applies it, may be sure that his work, though humble, is along scientific lines.

PROGRESS IN OBSTETRICS AND GYNÆCOLOGY IN GERMANY.

BY E. S. M'KEE, M. D., CINCINNATI, OHIO.

HYPEREMESIS Gravidorum is treated in a new and novel manner in the general hospital in Vienna. A hard rubber speculum is introduced into the vagina, engaging the cervix uteri as much as possible. The external end is then elevated and a ten per cent. solution of the nitrate of silver is poured in so the whole neck of the uterus is bathed in it for ten minutes.

Sterility in women is explained by Noegerath, in a number of cases, by the statement that those women who have had gonorrhea never conceive, on account of the presence of the disease in a latent form. Demi-mondes rarely become pregnant, because they have usually had the gonorrhea.

Absolute non-interference is the rule in the third stage of labor among many German obstetricians.

Hypnotism, or siggignoscism, as a means of doing away with the pains of labor, seems to be gaining some followers among those who possess the required power. It was introduced by Pritzel of Vienna.

Salpingitis has been divided by Säger into five different divisions. There are: (1) Salpingitis gonorrheica, produced by the gonococcus of Neiser; (2) salpingitis tuberculosa, produced by the bacillus tuberculosis of Koch; (3) salpingitis actinomycotica, produced by the actinomyces bovis of Bollinger; (4) salpingitis septica; (5) salpingitis syphilitica.

The teachings of Credé are tending toward the entire letting alone of the genitals during labor and the days succeeding it. This distinguished obstetrician, unless some

abnormality is present, does not make a vaginal examination at all. He makes his diagnosis entirely by external palpation and manipulation. He teaches that for eight or nine days after labor one should neither examine, wash out nor do anything to the genitals, unless there are positive indications therefor.

Solution of cocaine, four per cent., is followed by good results, applied to the upper part of the vagina and cervix during dilatation, and to the ostium vaginæ and perineum during the expulsive effort. It prevents pain in some instances for twenty minutes.

The use of axis-traction forceps, according to Carl Braun, would result, in many cases, in the bringing of living children through deformed pelves where, in the absence of these forceps, craniotomy would be necessary. He frequently uses the Simpson forceps, modified by himself, which he terms tri-form forceps. The instrument, as modified, Braun thinks can be used in the high and low operation, and, in fact, on every occasion where an instrument is indicated.

Iodoform gauze has been recently found of great value by Fritsch in the palliative treatment of carcinoma, which he terms the dry method. It relieves the foul discharges, hemorrhage and pain, so the patients think they are well. He has also successfully used it after removing sloughing portions of the placenta or uterine polypi.

The diagnosis of beginning carcinoma cervicis uteri, always a question of the greatest importance, has recently gained in meaning since the operative treatment of cancer of the uterus has rendered its cure possible, provided the case be recognized at a sufficiently early stage. The known symptoms are numerous, yet the difficulty will always exist of distinguishing beginning cancer from erosion. Stratz has thoroughly studied this subject. The diseased surface is everywhere separated from the sound tissue; it does not change gradually from one to the other.

2. A difference in level between the diseased part and the healthy can always be recognized.

3. The cancerous portions always have a yellowish tint.

trols the hemorrhage, after the cut into the uterus, by the rubber tube or manual compression. He takes care that the uterine cavity is entirely cleared from decidua. He wishes the uterine sutures to be very exact in their coaptation. He stimulates contraction by manual massage of the sutured uterus. Professor Gusserow of Berlin follows this plan when operating: He commences the incision three finger-breadths below the umbilicus, and continues it within three or four inches of the symphysis pubis. The abdomen is opened, the uterus presents and the walls close behind it. The uterus is surrounded in its lower half below the child's head by a rubber tube the size of the finger. Sutures are passed through the adductor muscles to prevent the protrusion of the intestines, which will be done unless there is much vomiting. If the bowels protrude, retain them with warm cloths. The uterus is opened with an incision beginning near the fundus and extending down to the inferior uterine segment to the place where the peritoneum is movable. If the placenta lies in the line of the incision, a large amount of black blood will burst forth. Cut through this and the liquor amnii will gush out. Any hemorrhage which may occur from the uterine incision can be controlled by drawing on the rubber band surrounding the uterus. The child is then removed. The uterus generally remains relaxed during the remainder of the operation. The placenta and membrane are taken away and the uterine cavity strewn with iodoform. He takes about eight silver sutures to close the incision. These enclose muscle without decidua. About sixteen silk sutures are then applied, which penetrate the peritoneum only. Resection of the muscle is sometimes, but not always, necessary. It is not if the peritoneum extend some distance over the muscle. If hemorrhage is now present, stop it by ligating the spouting arteries. If the uterus still remains relaxed, cause it to retract by applying sponges soaked in hot sublimate solution. Powder the suture line with iodoform, replace the uterus in the abdominal cavity and close this by suture. Fifty cases. of Sanger's operation

have thus far been reported with the following results: For the mother, recovery in 36 cases, or 72 per cent.; death in 14 cases, or 28 per cent. Result for children, born alive 46, or 92 per cent.; died 4, or 8 per cent. Germany had 34 cases with 30 recoveries and 4 deaths. Children, 32 living, 2 dead. Austria had 5 cases, with 2 recoveries and 3 deaths; children, 5 living and none dead. United States, 6 cases, with 2 recoveries and 4 deaths; children, 4 living and 2 dead. Italy, 3 cases, with 2 recoveries and 1 death; children, 3 living. Russia, 2 cases, with no recoveries and 2 deaths; children, 2 alive. France, 1 case, with 1 recovery and no death; 1 child alive. It is easy to see the best reports come from Germany. Leipsic and Dresden are far in the lead. Of the 7 cases done in Leipsic, there were 7 recoveries of mothers and 7 living children. Of the 14 cases in Dresden, 13 recovered and 14 living children were born. The first 50 cases after Porro's method resulted in 21 recoveries, or 42 per cent.; after Sanger, the first 50 cases resulted in 36 recoveries, or 72 per cent. After Porro, 29 died, or 58 per cent.; after Sanger, 14 died, or 28 per cent. This shows a difference of 30 per cent. in favor of the conservative method of Sanger.

Vaginal total extirpation of the uterus for cancer is a subject which has received much merited attention of late from the Germans. Sufficient material has been collected during the past ten years to decide whether this is a practical operation or not, and whether it gives permanent and favorable results which justify its consideration as superior to any other treatment of the cancerous uterus up to the present time. Vaginal extirpation has obtained decided recognition in Germany, and the purely vaginal operation of Czerney, Billroth and Schroeder has succeeded the procedure of Freund, which was a combination of the vaginal and abdominal methods. In 1881 Olshausen collected 41 cases, with a mortality of 29 per cent. In 1886 Sanger collected 133 cases with 28 per cent. mortality. In 1883 Sanger collected 157 cases, with 29 per cent. mortality. A. Martin, up to the close of 1886, had 311 cases, with 47 deaths, or 15.1 per cent. Thus we

see that with increased experience the mortality is gradually decreasing, and its continued decrease is to be expected. As to immediate mortality, the operation now shows better results than the removal of the breast for cancer.

Dr. Martin, in operating, may be described as follows: The bowels are thoroughly emptied, the vagina thoroughly disinfected by an antiseptic irrigation, the patient placed in position on her back and hips, and put under chloroform. The vault of the vagina is exposed by means of a speculum and side pieces; the cervix is seized by bullet forceps on its posterior border, and drawn forward as far as possible towards the symphysis pubis. This stretches the posterior arch of the vagina and the insertion of the vagina can be very nicely determined. He then makes an incision along the whole length of the insertion, so as to get into Douglas' cul-de-sac as quickly as possible. This he frequently attains at the first cut. This accomplished, he enlarges the cut so that the forefinger of the left hand can enter, and then, with a small needle very much curved, he sews around the entire border of the cut in the vagina. He generally uses four or five of these sutures, which unite the peritoneum of Douglas' cul-de-sac to the vaginal wall, and all hemorrhage at this point is stopped. He next sews up the stump of the broad ligament, using large needles with double threads. These threads must also unite the peritoneum and the vaginal wall. Generally he uses the three of these on each side, by means of which he firmly unites the floor of the pelvis and the vagina, as far as the anterior border of the cervix, thus more securely controlling the vessels. To separate the floor of the pelvis, as far as its anterior border, from the cervix, the knife is thrust directly forward along the cervix uteri on both sides; this lies entirely free, that is, as high as the fundus. After all hemorrhage has been stopped, he cuts around the anterior periphery, at the same time drawing the uterus forcibly backward, and putting the anterior vaginal wall on the stretch. Having cut through the vaginal wall, he separates the bladder with his finger nail as far as he can discover any attach-

ment. This is found to vary from one to five centimeters in thickness, or even more, and it is sometimes necessary to use the knife in order to separate the firmest bands of union. The suture of the surface, which has been separated, to the vaginal wall, must here be made as exactly as possible. Four sutures are usually sufficient to stop the hemorrhage and restore the continuity of the vaginal wall. When the hemorrhage has entirely ceased, he once 'more grasps the posterior portion of the uterus which has been separated, and having determined the size and mobility, seizes the lip with Muzeaux forceps and draws it forward forcibly. A Sims speculum or a side holder placed in Douglas' cul-de-sac protects the fundus as it is drawn from catching on the posterior border of the wound. By making fresh grasps with the Muzeaux forceps, the posterior wall of the cervix and the fundus are guided into the opening. If the uterus is freely movable and not too large, this procedure is simple; otherwise it is quite tedious. In some instances an advantage is gained by pushing the uterine cervix up behind the pubis. In other cases a blunt sound run up into the uterine cavity is quite an assistance. A disadvantage in using this instrument is that the posterior border is often bored through and the contents of the uterus escape over the surface of the wound. As soon as the fundus of the uterus presents itself, it easily follows through the opening if the attachments have been well separated. In some instances the use of the knife is necessary. Excessive hemorrhage often accompanies the further detachment of the uterus while in this inverted condition and renders it very difficult. He isolates the insertion of the broad ligaments to the organs, displays the tubes and that portion of the broad ligament lying near them, in order that he may tie it in one, two or three segments, which is accomplished on both sides before he cuts away the uterus itself. There still remains a thick mass of tissue at the sides of the lower segment of the fundus, which must be separated. The separation of the uterus from the bladder is easily accomplished if one always works close to the uterus. Martin prefers to sew the perito-

neum and vagina together before completing the separation, thereby not allowing the peritoneum to slip beyond control. After completing the left side, the separation of the broad ligament stump is attained. Here the control of the hemorrhage and the fixation of the stump is secured by sutures, before the uterus is completely freed. The loops of intestine seldom come down to the seat of the operation or in sight. If they do come in the way lay a sponge on them and protect them. The ovaries and tubes often come down into the wound, especially when they are much enlarged. In such cases they can be ligated and cut away with little difficulty. Thus far a continuous stream of a weak solution of carbolic acid suffices to keep the wound cleansed. Recently it is his practice to use two or three small sponges to cleanse Douglas' cul-de-sac. These are secured by long bullet forceps and drawn over the edges of the wound to make them safer. He inserts into Douglas' cul-de-sac a thick drainage tube which is held in place by a cross piece. He has not experienced excessive hemorrhage following extirpation of the uterus. After ascertaining the condition of the bladder the operation is concluded. Its duration varies from twenty minutes to two hours, according to the difficulties encountered. Sometimes the hemorrhage is exceedingly small, not exceeding fifteen grammes. The hemorrhage is especially great if the neighboring tissue be diseased, whether they are old cicatrices from a former inflammation or a commencing inflammation. A considerable experience in the use of the needle is necessary for the prompt control of this hemorrhage. If easily done, he recommends the removal of the ovaries and tubes. It is not the custom in Germany as in France, and to some extent in England, to use the clamping forceps to restrain the hemorrhage from the ligamenta lata. Martin says that you can tell that cancer is limited to an organ by its having a layer of entirely healthy tissue about it. Leopold thinks it not always possible to tell whether the disease is confined to an organ or not. The prognosis in the total extirpation of the uterus is now quite as good as the supra-vaginal operation and is rapidly supplanting it in Germany and also in other countries.

A CLINICAL STUDY ON THE USE OF ELECTRICITY IN DERMATOLOGY.

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MORE than half a century ago the demonstrations of Michael Faraday made accessible to us all the process of decomposing compound substances by means of electricity. And more than half a century has passed since the classical papers of this investigator were given to the world. Yet the electrolysis of Faraday—for so he called it—has been utilized for the most part by the artisan.

It is true its empirical use in medicine has fulfilled, from time to time, certain ill-defined conditions, but its practical application to animal tissues and the changes therein wrought have only of late been clearly and systematically studied.

M. Burgoin (1) first called attention to what he called the fundamental principle of electrolysis—the appearance of an acid at the positive and an alkali at the negative pole. While to Ciniselli (2) we are indebted for the first careful study of the chemical changes which take place in the interpolar circuit.

Later Onimus and Blum (3) confirmed the observations of Burgoin. They further demonstrated that when an electric current is applied to muscle there takes place a decomposition of its salts, in which the oxygen radicals—sulphuric, nitric, phosphoric and hydrochloric acid—pass to the anode, while those pertaining to the hydrogen element—soda, potassa and ammonia—pass to the negative terminal (4).

Frommhold (5) observing these molecular changes, discovered another, though closely allied, physical phenomenon—*Electrical Osmosis*, or the process of transferring liquids

(1)—Journ. de Pharm. et de Chemie. 1860, 1867.

(2)—Gazette des Hop. 1860.

(3)—Bulletin Gen. de Therapeut. Tome IXXXII, Paris.

(4)—Amory Treatise on Electrolysis. 1886.

(5)—Hand-book of Gen. Therap. Ziemssen, Vol. II.

through a porous medium. By some, and by Frommhold himself, this was looked upon, *in modo et forma*, as the true explanation of the electrolytic action. At this time the mechanical transportation of drugs through living animal tissues received attention, and Frommhold taught that by this means it might be effected.

Apparently, however, the electrical osmosis of Frommhold and chemical disintegration by electricity are identical. In both molecular cohesion is overcome by electrical force, and in both molecular affinity is less than the affinity of the elements for their respective electrodes. But in osmosis as demonstrated by Frommhold the fluid is transported *en masse* with a force greater than that of gravitation and without chemical disintegration.

Again, the immediate as well as the remote effects of electrolysis on living animal tissues have been studied by Cini-selli, who, in a memoir before the Surgical Society of Paris (1860), demonstrated to the satisfaction of those present that the current when so applied possessed properties of a three-fold nature, which he called physiological, calorific and chemical. It is upon this basis that we apply the electrical force in medicine, but it is of recent date that it has been regulated with any degree of accurate measurement by the general introduction of the milliampère meter.

With this brief mention of the proximate principles of the electrical force as applied to the living organism, permit me, without further trespassing on your space, to offer a few suggestions which are prompted by the application of the afore-said principles to dermatological practice.

THE REMOVAL OF SUPERFLUOUS HAIR.

You are familiar, doubtless, with the method of depilation by electrolysis, which is now the established treatment for hypertrichosis. It was first used and advocated by our eminent countryman, Dr. Hardaway of St. Louis, although the conceptions which led to its development are those of Dr. C. E. Michel of the same city.

The details of this procedure have been given so frequently

and so ably by others that it would be superfluous to repeat. Suffice it for the present to point out certain difficulties one is liable to meet with in their application, as well as to call attention to dangers which unskilled or careless manipulation may entail.

At the outset some difficulty may be experienced in selecting a suitable battery, not alone from the variety of manufacture but because the opinion of authors is so widely at variance respecting the properties of high and low tension currents for depilatory purposes. It is not my purpose, nor is it within the scope of this paper, to recommend any special instrument, but experience prompts me to advise a battery arranged for volume, with a voltage only sufficient to overcome the resistance imposed within the external circuit. Some of the dip galvanic batteries in general use may be arranged for volume by reversing the second series and connecting the terminal carbons and the terminal zinc plates with bifurcated cords.

Quite recently Dr. Amory of Boston has very kindly directed my attention to a cell manufactured by the Roberts-Brevoort Electric company of New York, which generates a current of two and a half ampères one hour a day for one hundred days. The tension of each cell is two volts. He further says its action as an inflammatory agent on the tissues of the body is very feeble, whereas its destroying action upon the hair bulb is very definite and rapid. Whatever cell or combination of cells be used, avoid high voltage, for with such a battery the destruction of tissues surrounding the hair follicle will be more extensive, the subsequent dermatitis will be more severe, permanent scars are more liable to ensue, and withal there is an element of danger.

To obtain the chemical effect of Ciniselli (*loc. cit.*) as well as the cataphoric action of the older writers, the needle, a fine steel one, should be attached to the cathode.

I have attached a platinum needle to the anode of a high tension battery, a few times, with the following result: The time required to loosen the hair was longer; the immediate effect in tissues adjacent was less marked, but the following

day they were painful, with a firm nodule at the point of each insertion. The cicatrix which followed was slow to disappear. In operating for hypertrichosis one should bear in mind that the hair papilla is the part to be destroyed. On the upper lip and chin this may be easily done, but in the submaxillary region the root often pursues a curved or irregularly oblique direction, which makes it difficult to follow. In consequence of this the papilla frequently remains intact and the hair returns.

The ampère strength will vary according to the vigor of the growth. From a half to three milliampères have been found to be the usual limits.

TO PROMOTE THE GROWTH OF HAIR.

Equally important with the destruction of the hair is its stimulation to growth. Without entering into the etiology of the various forms of alopecia, which in the treatment should be taken into account, it may be said with truth that we have in electricity a promoter of cell growth as well as a power of destruction.

As previously noted, oxygen collects at the anode when the living tissues are inclosed within the external circuit. It is known, too, that oxidation, within physiological limits, is an important factor in growth. In vegetable life electricity increases cellular growth, and under its influence the plant towers upward with greater luxuriance. May not the analogy be applied to the hair papilla? In any case it acts as a local irritant and as such draws on the systemic supply of cell forming material.

During the past year I have made a series of experiments with the anode of a high tension battery in the treatment of various forms of alopecia, from which I feel warranted in drawing the following conclusions:

Alopecia, unaccompanied by inflammatory conditions of the scalp, in which the existing condition is atrophy of the hair-bulb, is benefited by electricity.

Alopecia areata, not due to local inflammation or traumatism, is benefited by the same means. Syphilitic alopecia

is not affected by electricity. In the first the applications may be made bi-weekly from ten to fifteen minutes with an insulated metallic brush, while a carbon disk is more conveniently applied to the second.

NÆVI, PAPILLOMATA, FIBROMATA AND CHLOASMA.

In the first named of these disfigurements one must distinguish between pigmentary and vascular nævi. In the former, electrolysis is undoubtedly the treatment *par excellence*. In the latter, one must consider the extent of the telangiectasia in giving a prognosis. Thus the superficial nævus araneus is most easily removed, but not so easily the deep port wine nævus of large area. Benefited it may be, but at the present writing I have not succeeded in removing them to the complete satisfaction of myself or my patrons.

For nævus pigmentosus attach the needle to the cathode, as for epilation. Theoretically one would use the opposite pole in telangiectasia of the derma, because it possesses the power to coagulate blood. Tests made with the electrodes in an extensive nævus have not confirmed this. It is better, however, to thrust both electrodes into the nævus.

In a case of molluscum fibrosum, treated by electrolysis, only a few small tumors the size of a large pea were satisfactorily removed.

But again, in papillary growths of the skin we have in electrolysis a safe and an efficient mode of treatment.

In the derangements of pigmentation, known as chloasma, the bi-weekly use of a low tension current of one milliamperè caused the discoloration to disappear. In one case the disease returned at the end of four months. The treatment was resumed with but little positive benefit. One other case of eight months ago remains well. No cause could be assigned for the chloasma in either case.

In the treatment of the papillomata the object is a localized destruction. For this purpose a needle, connected with a current of high tension, should be thrust into the growth at different points. Derangements of pigmentation require the electrolytic effect with the least subsequent inflammation pos-

sible ; consequently a current of low tension should be used with the negative terminal attached to a carbon disk.

The foregoing applications of electricity in diseases of the skin, most of which are established, are not given as comprising a complete range, but refer only to such as have been confirmed by the writer's personal experience.

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VESICO-VAGINAL FISTULA.

BY REUBEN A. VANCE, M. D., CLEVELAND, OHIO.

(Continued from page 175.)

CASE 2.—TWO FISTULÆ—VESICO-VAGINAL AND VESICO-UTERO-VAGINAL ; TWO OPERATIONS ; CURE.

MRS. ELIZA McMANAMON, thirty-three years of age, a native of England, residing at 60 Higgins street, has borne eight children, two still-born, the others alive at birth. Fell in labor with her last child Sunday, October 23, 1887, at 1:30 A. M. Was attended by a midwife ; the breaking of the waters the first indication of approaching confinement—pains expulsive and continuous from that moment. The exhaustion of patient and failure of pains to advance the head led the family to summon a physician at 5 P. M. Sunday. Dr. Bard responded and resorted to the use of instruments. After much trouble the head finally delivered with forceps ; body remained in passages and resisted efforts to extract. Additional aid sent for. Dr. Gentsch soon arrived, and completed delivery manually. On Tuesday patient drew the midwife's attention to the fact that she had passed no water since confinement, and that the bed was constantly soaked with urine. Limy material was speedily formed on the external genitals ; the parts became swollen and painful and patient's sufferings were extreme. I was called to the case November 19, made an examination, informed the patient

of the existence of a vesico-vaginal fistula and the necessity for an operation.

The examination revealed the following: The vagina was encroached upon in all directions by inflammatory indurations, and the whole of the vesico-vaginal septum was covered with sabulous material. The vaginal aspect of the rectum at one spot was thickened with the same deposit: on passing the finger into the bladder a patch of similar character could be felt on the anterior wall of that viscus. It was impossible, with any kind of speculum, to obtain a view of the fistula.

Large quantities of very hot water were ordered injected into the vagina twice daily; the sabulous material was to be removed by Dr. Gentsch, the attending physician, and Turner's cerate applied locally. During November and December I saw the patient once, and occasionally twice, a week and endeavored to expose the fistula with Simon's spéculum and free its edges of sabulous material. After December 20 I saw her every other day, and applied the solid stick of nitrate of silver to the deposits on rectum and about fistula that heretofore had proved intractable. Under this treatment they speedily disappeared. January 1, 1888, by the aid of Simon's speculum, I obtained a view of the fistula, the edges of which were thick and vascular, but a band radiating from its left side prevented a satisfactory examination. Dilatation with rubber bags first, next with Sims' glass dilators, and then with rubber dilators finally enabled me to introduce a Bozeman speculum with which I could not only explore but at the same time dilate and make applications to the deep parts. With this instrument the fistula was revealed in its natural relations to adjacent parts. The neck of the uterus had been severed in the middle line in front; a band of cicatricial tissue connected the separated segments of the cervix—this was thin and terminated below in a sharp, rigid edge. From a point above and to the left of the divided cervix downwards in a semilunar form across the septum to the right, extended the fistula. The appended diagram, fig. 1, accurately illustrates the situation of the

fistula, its relation to the lacerated cervix and the relative thickness of its edges. At first glance its position and relation to the cicatricial tissue connecting separated segments of the cervix was very deceptive: only by grasping the borders of the laceration with tenacula and forcibly approximating the edges of the torn neck could its situation be correctly determined. It was then apparent that the fistula originally involved the left vaginal cul-de-sac, that it wound around the left side of the neck and sent a branch up into the neck in the middle line in front, and that from the junction of these radii the main course of the fistula was downward and to the right. Across the branch running up into the neck an effort of repair had been initiated, and it

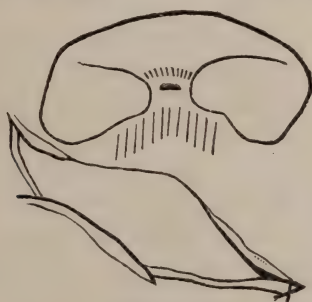


Fig. 1

seemed as if a firm band of connection of a triangular form with the base downward had been established between the separated cervical segments. The fistula at this time admitted two fingers: its edges were thick and vascular except near the middle line above where the band alluded to joined it—here they were rigid, thin and wiry. Much difficulty was experienced in getting rid of the sabulous deposit on the anterior wall of the bladder and recto-vaginal septum: it seemed as if much tissue had been destroyed in these situations—in the latter I feared the establishment of a fecal fistula. The nitrate of silver applications ultimately afforded relief: the next step was to relieve the tension seemingly exercised by a band radiating into the left vaginal culdesac. The continued use of the rubber bag dilators effected more than any other measure, especially when preceded by multi-

ple superficial incisions. The Bozeman speculum dilated the parts admirably, but until the day of operation it was necessary to supplement its action with thin rubber bags that could be introduced while the speculum was in place, and then forcibly expanded; they were retained without inconvenience for many hours. By this means a band running from the left superior extremity of the fistula back to the rectum was stretched to such a degree as to materially free the parts from tension. January 5 it was found that the edge of this band projected in a sharp semilunar form; that beyond it the elastic pressure of the bags had caused the vagina to become expansible—the edge of the band was deeply incised with scissors in two places and a rubber bag introduced and expanded. This measure rendered all parts of the fistula free and easily movable, with the exception of the sharp edge of cicatricial material projecting from between the torn segments of the uterine neck—this still continued sharp and wiry. About January 1, with the assistance of Dr. George W. West, an effort was made to obtain a view of the fistula with Simon's speculum. The condition of the parts was favorable to the employment of that instrument—the vaginal outlet was large, there were no cicatricial bands immediately within the ostium, and the vesical structures descended well when the patient was in the exaggerated lithotomy position. Yet it was at the expense of no little suffering to the patient that a partial view of the opening in the septum was obtained. The Bozeman speculum, while showing the fistula perfectly, seemed to explain the reason for the non-success with the Simon instrument in the firm semilunar band running down the left side of the upper part of vagina from the region of the upper extremity of the fistula to the rectum: after this was freely incised, January 5, the Simon speculum was again employed. It could be used to better advantage now, and the largest blade was inserted. The lower edge of the fistula came into view, but the upper extremity to the left of the uterine neck could not be exposed—it dipped down almost vertically and no manipulation would render it visible. The separated

segments of the uterine neck could be plainly seen, and it was easy to appreciate the nature of the material that connected them and filled the arm of the fistula running into the lacerated cervix. This was cicatricial tissue, and the border abutting on the fistula was very thin and seemingly almost bloodless. By using a tenaculum in the fistula and inserting it into the wedge of cicatricial tissue, it was possible to estimate its thickness. At fistulous margin it was very thin, but grew thicker as the edge was receded from. By using two tenacula at the same time, and cautiously everting different portions of the fistulous margins while the uterus was drawn towards the vaginal outlet, it could be seen that not only was the cicatricial mass between separated cervical segments of a triangular form upon its vaginal aspect, but it was triangular from before backwards: the base of the triangle in this case being at its uterine extremity—its apex at the fistulous margin. In fig. 1 the triangle of cicatricial tissue, with its base abutting on the fistula and its apex reaching the uterine canal and bounded laterally by the segments of the cervix, can be appreciated, while in fig. 5 the triangle, with its base upwards and its apex towards the former site of the fistula, is shown. Furthermore, vesical mucous membrane could be exposed at either extremity and along the lower margin of the fistula, but none was to be seen along the superior border.

January 10, 1888. Mrs. McManamon was operated on in the presence and with the assistance of Drs. Charles Gentsch, John Perrier and George W. West. The patient was supported in the right angle position upon the knees and chest, and the fistula exposed with a Bozeman speculum; the extremities of the fistula were seized from within by an Emmet's double tenaculum, and while the parts were stretched and firmly grasped by this admirable instrument, with straight and angular knives the whole circumference of the fistula was removed in a single piece. The knowledge already obtained of the peculiarities of the opening in the septum led me to freely excise the lower border of the fistula, terminating the incision just at the vesical border, while on

the upper margin the vaginal edge was just encroached on, the greater width of the incision being carried through parts naturally directed towards the vesical cavity. An examination of the circlet of fistulous border removed shows that the incised surfaces are nearly of equal depth, only that the lower margin comes wholly from the vaginal aspect, while the upper is wholly from the vesical surface of the opening; the extremities are angular and include both vaginal and vesical tissues. The patient was placed on her back and a prolonged vaginal douche of hot water administered to check the very free hemorrhage that ensued. This done, her former position was resumed, the Bozeman speculum re-

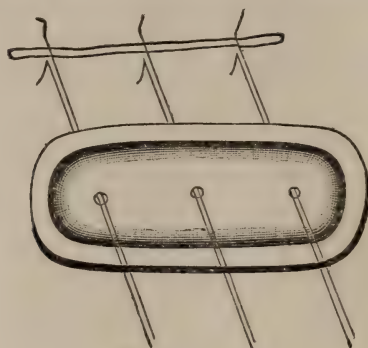


Fig. 2.

introduced, and while the uterus was drawn gently downwards the edges of the fistula were brought into apposition with tenacula. Number 26 silver wire was used and three strands passed—one in the centre and one on each side, half an inch from the first. When these were shouldered the borders of the fistula were in perfect apposition and so remained even when traction was let up on the uterus. Fig. 2 represents the aspect of the fistula during the passage of the button. These wires were, of course, preceded by loops of thread, and the needles carrying the latter were so inserted that they first entered the vaginal membrane on the lower margin a quarter of an inch from the edge of the fistula, and emerged at the vesical aspect of the incision near to, but not penetrating, the mucous membrane of the bladder; they were

carried across the opening and made to enter the incised margin of the upper border on its vesical surface, one-half an inch from its edge, and carried directly through to the vaginal canal. Each lateral wire was half an inch from the central one, and a quarter of an inch from the extremity of the fistula. A Bozeman button was modeled from lead, passed down the loops of wires, and after the edges of the fistula were seen to be nicely in place, perforated shot were used to clamp the sutures and the ends of the wires cut off. Fig. 3 represents the button in place, the ends of the wires being turned to the right and left over the compressed shot. The operation took forty-five minutes. Water was then thrown into the bladder to remove blood and to show the accuracy of the closure of the fistula. Not a drop came through the sutured wound, but to my surprise it bubbled



Fig. 3.

up through a previously unsuspected opening high up in the cervical canal. The patient was thus seen to have, in addition to the vesico-vaginal fistula just operated on, a vesico-utero-vaginal fistula in a very inaccessible situation. The patient was put to bed and left in the care of Mrs. Patterson, the same nurse who had charge of Mrs. Kimney. Hot vaginal douches were used twice a day, and a soft catheter kept constantly in the bladder. No anæsthetic used during operation.

The urine came through the vagina to a certain extent all the time, and notwithstanding every care, the external parts became raw. Cystitis developed on the third day, and great difficulty was encountered by the nurse in keeping the catheter free. January 18 I removed the button—it was heavily encrusted with urinary salts, but the line of union beneath was perfect—the wires remained until the twenty-fifth. After that period attempts were made to explore the remaining fistula and outline a plan for its cure.

January 27. The operation has completely obliterated the vesico-vaginal fistula, and the line of union is thick and firm. Fig. 4 indicates the situation and direction of the cicatrix, and the reference "A" points to the opening of the



Fig. 4.

utero-vesico-vaginal fistula. With an Emmet's uterine probe bent sharply upon itself at the end, the course of the fistula can be traced. Its orifice is at the highest point of reëntering angle of cicatricial tissue between separated segments of

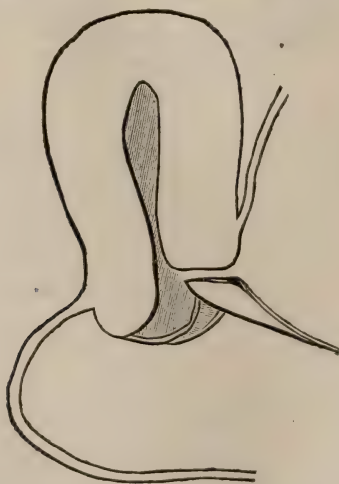


Fig. 5.

uterine neck; it opens into the cervical canal in such position that while the bent probe is inserted into fistula and cervix drawn towards sacrum with a *ténaculum*, the opening between uterus and bladder is seen to be far above the anterior reflection of vagina upon cervix. In its course to the bladder the

fistula is direct—it does not dip down towards the now obliterated opening in the septum. Its course and relations to adjacent parts are well shown in Fig. 5.

Notwithstanding the small size of the opening, the dribbling of urine was extremely annoying and caused the patient great distress. The neck of the uterus was constantly encrusted with urinary deposits, and attempts to dislodge them provoked free hemorrhage. It was not until the first week in February that the parts were restored to such a condition that I could determine upon my next procedure. I then determined to cut off smoothly the sides of the torn cervix, to freshen the surface of cicatricial material between, removing the orifice of the fistula, to loosen the sides of the neck so that they could be swung forward into apposition and rest upon this freshened part, and pass a silver suture in such manner that its centre would go just behind the neck of the fistula at its orifice, and when made tense, serve to hold the sides of the cervix together and close the fistulous canal by pressure, the cervix above and below this central strand being united by ordinary silver sutures. A Bozeman button was made into a collar-like form and perforated so that when the parts were freed and the wires passed, it could be speedily molded into shape and serve as a point of attachment and support for the central strand and accompanying sutures.

February 10, 1888. Assisted by Dr. George W. West, I operated for the cure of the vesico-utero-vaginal fistula at patient's house, 60 Higgins street. She was placed in the right angle position upon the knees and chest, and supported on a Bozeman's operating chair; no anæsthetic was used, and Bozeman's speculum employed. The sides of the cervix were cut entirely through and the incisions carried up until they met just beyond the fistula at the apex of the laceration; this dissection was tedious and took time—no effort was spared to make the surfaces of the same breadth and depth, and perfectly smooth. Sharp-pointed scissors were now used to remove the surface of the cicatricial mass intervening; this was ultimately accomplished in such manner

that the severed sides of the neck already partly detached, and the covering of the intervening cicatrix, including the orifice of the fistula, were removed in one continuous piece. The sides of the neck could now be drawn accurately into apposition; when separated forcibly, the end of the fistula could be seen at the apex of the triangle of denuded cervical structures. A needle, armed with a loop of silk, to the end of which a strand of number 26 silver wire was hooked, was passed in such manner that it entered one-half an inch from the denuded surface, went through the cervical tissues, and out beyond the fistula, having passed behind the latter. The needle reentered the tissues of the neck as close as possible to the point of emergence, and traversed the other side of the cervix in a reverse direction, coming out one-half an inch from the incised border. The wire was carried through and then its action when rendered tense observed. The sides of the cervix could be brought nicely into apposition by traction upon it; its influence upon the fistulous canal could not be so readily seen. The centre of the wire was beyond and below the termination of the fistula, and the freshened cervical structures above the end of the fistula and between it and the canal of the cervix could be seen to fall into contact as the ends of the wires were brought together and rendered tense. It was hoped that, when in position and tightened, this wire would not only aid in closing the cervical segments but act upon the end of the fistula in such manner as to prevent the passage of urine until the apposed structures of the cervix above could unite by the reparative process. As it seemed to be well situated for the purpose, two additional sutures were then inserted—one above, the other below this wire. These wires were silver, number 30, and were made to enter and emerge each a quarter of an inch from the borders of the denuded edges of the cervix. The wires were brought together, the button slid into place and the changes necessary in its form noted in order to make it encircle the lower half of the cervix when the severed surfaces of the latter were united. These were readily effected with the button-shaper, and the button returned to the place it was to occupy. In this button

there were four openings at right angles with each other; through those in the long axis of the button—one-half inch apart—the ends of the large central wire were passed, one on the right side, the other on the left; while through those in the short axis both wires of the sutures above and below the central wire were passed into corresponding openings in the usual manner. A perforated shot was carried down the central strand on the right and clamped; forcible tension was made on the free left extremity of this wire, a shot passed and compressed. By drawing the cervix down and inspecting the canal high up, it could be seen that the freshened tissues of the neck above the fistula were in accurate apposition. The upper suture, the ends of which passed through the single opening at the cervical border of the button, were then drawn taut and clamped; the same with the lower wires passing through the opening in the button at the border next the bladder. The parts were then carefully cleansed and the neck drawn forcibly up to see if the tissues gaped beneath. All appeared to be in proper position; the upper and lower sutures were cut off, and the projecting wires turned over the shot; the ends of the large central wire were severed, and the parts permitted to retract into their normal position. So far as could then be determined, this unusually shaped button seemed to fulfill all requirements. The operation occupied forty minutes and was neither very painful nor very tedious to the patient.

The hot water douches were continued as after the first operation, a soft catheter introduced every two hours during the day and left in all night. The nurse fell sick the day after the operation and the patient had to be committed to inexperienced hands. No trace of urinary dribbling was apparent at any time. February 18, the button removed and sutures and compressing strand of wire drawn out. There is complete union of the cervix to within an eighth of an inch of the margin of the neck. The catheter was discontinued and the patient permitted to get up.

February 21. Patient was this day examined in the presence of Dr. Bard, her former physician. The neck was

drawn down, cleansed of mucus, and a piece of old linen inserted and permitted to remain three minutes. When withdrawn it was dry. The fistula is entirely obliterated. The line of union of the neck within and without seems perfect—a slight depression alone marks the former site of the laceration. Substantially the same condition was revealed March 15, when last examination was made by Dr. George W. West and myself.

Thus was brought to a satisfactory termination a case not more trying to the poor sufferer than exhausting to the patience of the operator. It is putting it mildly to say that Mrs. McManamon was not always tractable. But when the loathsomeness of this morbid condition is taken into consideration, the only wonder is that these patients have any self-restraint at their command. And then I had led her to believe there was but a single opening to be closed, and while careful to warn her that more than one operation might be necessary for its cure, I had given her no intimation that I had any reason to suspect a second fistula existed until after the first operation was completed. Then it mattered not how much she was assured of the size of this opening and the certainty of its ultimate cure, her knowledge of the quantity of urine coming through the vagina, and the distress she continued to experience doubtless gave her reason for feeling despondent still, even when assured of the perfect success of the first operation. Finally, when the second operation did check the dribbling of urine and lead to a subsidence of the vaginal irritation, the patient's satisfaction was no greater than her surgeon's.

Again, this patient's condition after the first operation is a confirmation of the statement of Sims that the smallest opening in the bladder communicating with the genital passages is as bad as the largest, so far as the consequences due to urinary dribbling are concerned. It also has considerable weight as bearing upon Simon's view, that the urine passing over the edges of denuded and apposed fistulous margins will not necessarily prevent the reparative process.

Furthermore, as considerable discussion has taken place as

to the cause of these fistulæ in this patient—a discussion in which not infrequently dogmatic assertion has taken the place of thorough appreciation of the facts involved—I think it not inadvisable to put my own opinion on record. Much stress has been laid on the circumstance that there was an almost instantaneous discharge of urine through the vagina after delivery, and this, in connection with the fact that the labor was completed with instruments, has led some to ascribe to the forceps the sole agency in the production of the woman's unfortunate condition. Laying aside all other features that bear on the etiology—such as the duration of the second stage of labor and the peculiar character of the pains—two phenomena satisfy me as to the real agency in the production of the fistulæ: These are the extensive character of the cicatricial bands high up in the vagina, and the failure of nature to effect a spontaneous cure. These tell of extensive sloughs, and as these sloughs are produced by pressure, it is to pressure from delay in delivery and not to the instruments finally resorted to for relief, that the fistulæ must be ascribed.

[*To be continued.*]

APPARATUS FOR THE TREATMENT OF UTERINE FIBROIDS BY THE APOSTOLI METHOD.*

BY A. B. CARPENTER, M. D., CLEVELAND.

When we were invited to fill a portion of the time of this society, we felt loth to comply, realizing that the subject that we should like to speak upon was not with the better class of the profession in very good repute, and that, therefore, the attention of the members might be more profitably occupied by others. We will, however, speak briefly upon the subject of the electrolytic treatment of uterine fibroids and especially with reference to an original device

* Read before the Cleveland Society for Medical Science, March 19, 1888.

constructed for the purpose of supplying the electrolytic current independent of chemical action.

We are aware that the field of electricity has been, to a considerable extent, monopolized by charlatans who have made use of this agent as a clap-trap catch-penny and used by them for the purpose of imposing on an always credulous public; also that the application of the current had been, until a comparatively recent date, made in such an indefinite sort of way, that to a man who might feel inclined to try electro-therapeutics, would decline to recommend or adopt this form of treatment because of the lack of positive knowledge or definite instructions for procedure. These, we are inclined to believe, will furnish two important points of explanation for the apathy in this direction.

With the advent of the milliampère meter one of the greatest obstacles in the way to the scientific, as well as accurate application of electricity as a therapeutic agent, is being removed, and gives us a tangible basis to work upon as regards the administration of exact dosage. This at once appears not only reasonable, but it would seem practical and commends at least attention, and we venture the opinion that the physician who in the not far future gives electrical treatment without the use of instruments for measuring the dosage will be looked upon as we would one who would prescribe an eight ounce mixture and direct the patient to take a drink of the same every three hours. Such, Mr. President and gentlemen, is the value we predict will be accorded to these current measures in the near future, and by their use a system of electro-therapeutics based upon exact dosage will no doubt be permanently established.

The milliampère meters which you see here are made and tested by a Thompson standard and are as near accurate as it is possible to make them. They are designed to be used with the patient in the circuit and are not made for testing cells or the strength of batteries. This should always be remembered, as it matters not how

many milliampères of current your battery may generate, what we want to know is exactly how many milliampères of current are actually passing through the patient. As for example, the battery might show a strength of one hundred milliampères directly through the meter, but the resistance which the patient interposes may be so great that only four or five will be registered and in a given case be entirely inadequate. This brass instrument is manufactured by a well-known New York firm, is very desirable and reliable. It has, as you see, a mirror for reflecting the register to us while we are operating. It is manufactured at a net price of twenty-four dollars, is uncomplicated and very durable, is constructed on a basis of seven ohms resistance and can, without danger to its good working, be used to test the electro-motive force of cells, but is not so intended. It is one of the best. This other one is manufactured by a Chicago firm and must not be used for testing cells; is very delicate and withal a very fine instrument and costs net twenty dollars. They are the only reliable instruments manufactured in this country that I am acquainted with. This much then for the milliampère meter.

A BRIEF CONSIDERATION OF THE ELECTROLYTIC CURRENT, ITS
SOURCE OF SUPPLY, ETC.

Physicians who have had occasion to use electricity know well the difficulty experienced in keeping their batteries in good working order. Evaporation, polarization, the frequent inspection, renewal of the battery elements and fluids have made the operating of large batteries no trivial matter.

The treatment of uterine fibroids by the Apostoli method, necessitating as it does a large number of cells of high electro-motive force, has only served to increase the burden. So long as electrolytic work was confined to the use of a small number of cells, the task of caring for our apparatus was proportionately light; but with the advent of batteries of high electro-motive force, which means rapid destruction of the elements, it at once becomes evident that some other means less expensive for supplying the electrolytic current is very much to be desired.

For the purpose of placing before you something definite regarding the most durable as well as economical cell for battery use, a series of experiments will be quoted, the cells included in these tests being as follows:

(a) Crowfoot gravity; (b) Law (sal ammoniac); (c) Diamond Carbon (sal ammoniac); (d) Leclanché (sal ammoniac).

(a) The Crowfoot gravity is entirely unsuited for our use, as the electro-motive force is low and the constant attention required makes this variety of cell in our opinion not desirable. A freshly prepared cell of twelve hours gives only 325 milliampères with seven ohms resistance. The Crowfoot will, however, with a closed circuit, live longer than the sal ammoniac, but the two fluids are continually getting out of proportion, and unless we constantly inspect and add water and, from time to time, cupri sulph, our battery will not do good work. This cell is also very uncleanly.

(b) The Law cell (sal ammoniac) has a low electro-motive force and in consequence is long lived. A new cell of six hours (open circuit) gave with 7 ohms resistance 400 milliampères. The circuit remained closed for three hours, at which time 105 milliampères were registered. A rest of twelve hours showed that the cell had depolarized to 380 milliampères.

The electro-motive force of this cell is too low and is not desirable.

(c) The Diamond Carbon (sal ammoniac) is a good cell. It has a very high electro-motive force and is, as far as possible under the circumstances, fairly long lived. A new cell of six hours (open circuit) gave with 7 ohms resistance 1500 milliampères. The circuit remained closed for three hours, at which time 375 milliampères were registered. A rest of twelve hours showed that this cell had depolarized to 1200 milliampères.

(d) The Leclanché new cell of six hours (open circuit) gave with 7 ohms resistance 1200 milliampères. The circuit remained closed for three hours, at which time 515 milliam-

pères were registered. A rest of twelve hours showed that this cell had depolarized to 1000 milliampères.

The conclusions arrived at after making these tests are :

(a) Crowfoot gravity cell has not sufficient electro-motive force; in fact, all gravity cells are bad, as they require too much attention.

(b) Law cell, electro-motive force too low.

(c) Diamond Carbon cell is a good one, indeed, one of the best, is very cleanly and will live nearly as long as the Leclanché.

(d) Leclanché cell, known by the trade-mark as Gonda, is commendable on account of its size, as it is only two-thirds as large as the others. It has a high electro-motive force, is as long, or longer lived than the D. C. Either of the two last named will prove satisfactory and will require little or no attention for months at a time. They cost about \$1.25 each net, and have an electro-motive force of about one and a half volts to a cell. Aside from the necessity for renewal of the elements once a year, they are nearly perfect so far as a fluid cell can be. The renewal of the elements costs about 70 cents a cell. There are, as you know, other means for securing the electric current than by the use of cells, and your attention is invited for a few moments to a consideration of what is being done to accomplish this object.

Dr. F. H. Martin of Chicago has devised a miniature dynamo for this purpose, and claims for it both the electrolytic and galvano-caustic currents. We had the pleasure of witnessing a test of the machine while on a visit to the doctor a short time since, and must say that it worked admirably. The noise made while running will, it seems to us, make it objectionable for office use.

The apparatus which we show this evening simply makes use of the current of the Thompson-Houston incandescent lighting system direct from the street wire; the Edison system will work equally well. A rheostat is introduced whereby the current is reduced to a minimum, then with an ordinary switch-board the current is increased or diminished, according as resistance is cut in or out. A milliampère meter is used, so that the current is accurately measured while the

patient is in the circuit. The device is safe, as the entire voltage of the wire can be handled without the rheostat. The wire furnishes a very even current with an electro-motive force of 110 volts, and a maximum strength of $\frac{1}{20}$ of an ampère. The main line, to which my connections are made, carries an even current, does not vary in voltage, and is always charged both night and day, as it is used for commercial purposes and furnishes light for basements, dark shops and rooms. A wire of this description and voltage, we are informed, is in use in all large and in many of the small cities, so that little trouble will be met with in getting connection with a line having a day current, and when this is once accomplished, the work of caring for a battery of a large number of cells is at an end, and we will have an apparatus that is always ready, reliable, durable, cleanly and economical. The charge for the annual rental of the wire, not including the cost of putting in, is ten dollars per year.

A word regarding the danger from contact with the electric light wire. The Thompson-Houston or Edison incandescent system of 110 volts is harmless, and should not be confounded with the *arc system of Brush and others, as the strength of the arc current is not less than six amperes, of course dangerous and must never be used.*

For the purpose of meeting and providing against any complications, as well as to anticipate criticisms, we have placed here, as you see, two safety devices, one a fuse box, the same being so constructed that the lead wire connections will instantly melt, breaking the circuit. The other is what is known as a grounder for the purpose of carrying off any extra current. We have had the apparatus in daily use since its completion several weeks since, and our expectations have been fully realized by the simplicity and beauty of its action.

It is claimed, as you all are no doubt aware, that the treatment of uterine fibroids by electrolysis controls pain, restores the patient to a fairly normal menstrual condition, and in a considerable number of cases the tumor is made to entirely disappear. It is becoming a recognized fact that if

we can carry the patient on to her meno-pause, she is then permanently relieved of her trouble; that in a great majority of cases the tumor "annoys but does not kill," and only in extreme cases are we to advise resort to the knife. If such be the case, it would seem not only conservative but reasonable to give the patient the benefit of electrolytic treatment before we recommend an operation for either hysterectomy or oophorectomy. Should electricity fail to give relief, we have not complicated matters—we will always have laparotomy to fall back upon, providing our patient's condition becomes unbearable, or hemorrhage threatens life and with no less chances for recovery.

The Cleveland Medical Gazette.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY

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Changes for advertisements must reach us not later than the second week of the month to be corrected in current number, addressed to W. N. GATES, Manager Advertising Department, 10 Public Square.

EDITED BY A. R. BAKER AND S. W. KELLEY.

EDITORIAL.

A FEW WORDS ON PLAGIARISM.

In the September, 1887, number of Lippincott's monthly magazine, William S. Walsh contributes the following, which may be of interest to the physician, as well as to the general reader, especially at this time when so many medical writers are claiming priority in making and publishing various alleged new discoveries, all of which may be very old if we would but take the time and trouble to look up the literature of the subject:

To the end of "Allan Quatermain" Mr. Haggard has appended, under the heading of "Authorities," a list of the persons and the books that have been of any assistance to him in the preparation of his novel. This is done to ward off the attacks of the literary detective, but it will probably be fruitless; and in any event, the literary detective is too

small an animalcule to be deferred to in this way. What should be the main object of a writer?—a selfish desire to tickle his own vanity, or an altruistic pleasure in giving pleasure to his reader? If the latter, and if he succeeds, why should the reader inquire too curiously into the sources of his pleasure? In enjoying a dish you don't care to know where its constituent elements came from. The Reviewer confesses that it is difficult for him to summon up any indignation over the most flagrant instances of plagiarism. He is rejoiced that Shakespeare and Molière had so little literary conscience—Shakespeare, whom poor Greene called “an upstart crow beautified with our feathers,” and Molière, who “reconquered his own wherever he found it.” He is grateful to Owen Meredith for having transformed George Sand's “Lavinia” into “Lucille;” to Charles Reade for having altered one of Maquet's dramas into his novel of “White Lies;” to Thomas Hardy for having adapted a chapter from “Georgia Scenes” so as to fit it into “The Trumpet Major.” He is grateful to these authors for the pleasure they have given him, as it is more than likely he would never have come across the originals. And the original authors ought to have been unselfish enough to rejoice that their creations had given this additional delight. “What matters it to the world,” says Longfellow, “whether I or you or another man did such a deed or wrote such a book, so be it the deed and book were well done?” And, *a fortiori*, what matters it who gets the credit? The perfection of form which the proverbs of all nations have attained is owing to the fact that their rough edges have been gradually smoothed and polished as they passed from mouth to mouth without any autorial vanity to hinder their progress. The same is true of the popular ballads and epics—it may even be true of the “Iliad” and the “Odyssey.” In modern times a large proportion of the wise sayings of great authors, which have become embalmed as familiar quotations, can be traced back through many hands to the rude quarry from which they sprung. And as to incident, anyone who has the smallest familiarity with comparative folk-lore and mythology is well aware that

originality is impossible. Wiseacres have begun to see a resemblance between "Allan Quatermain" and Mayo's forgotten romance of "Kaloolah." There is a resemblance, undoubtedly; but "Kaloolah," in its turn, resembles "Peter Wilkins," and "Peter Wilkins" resembles a number of mediæval romances, and they can be traced to eastern sources, and so on *ad infinitum*. Very likely Mr. Haggard never read "Kaloolah," as he asserts that he never read "Peter Wilkins" before writing his story. In his recent article on "Plagiarism" Mr. Andrew Lang says, "It lately happened to me to see an illustration of an unpublished work, in which a wounded and dying warrior was using his last force to break, with singular consequences, the weapon that had been his lifelong companion. I knew (being bookish) the incident was perfectly familiar to me, but I could not remember where I had met it before. It haunted me like the names which you try to recover from faithless memory, and one day it flashed on me that this incident was at least eight hundred years old. But I leave (not its source, for the novelist, who is no book-man, had probably never tasted of that literary fountain) but the place of its early appearance, to be remembered or discovered by anyone who is curious enough to consult his memory or his library. But here another question arises: let it be granted that the novelist first found the situation where I found it, and is there any reason in the world why he should not make what is a thoroughly original use of it? The imagination or invention needed for this particular adaptation was at least as vivid and romantic as the original conception, which, again, might occur, and may have occurred, separately, to minds in Japan and in Peru." The novel in question is "Allan Quatermain," in which Umslopogaas treats his trusty battle-axe, Inkosikaas, exactly as Roland in the Carolingian romance treats his wondrous sword Durandal. All which encourages the Reviewer to remark that if ever he finds it easier to steal brilliant things than to say them, he may himself turn plagiarist.

THE VILLAGE DOCTOR.

It has often occurred to us that our novelists and story writers have always succeeded in presenting to us more truthful pictures of people as they are in all the various walks of life than that of the physician. They for some reason fail to catch the *professional spirit*. With one exception they have always presented to our mind only gross caricatures of physicians—they are either quacks, saints, devils or mountebanks. The one exception is George Eliot's character of Lydgate, in 'Middlemarch.' Notwithstanding Lydgate proved to be a poor sort of a doctor and made a miserable failure of his professional life, we think every physician will recognize in this young struggling physician something akin to his own early experience in the practice of his profession.

Julian Hawthorne, in the August number of the American Magazine, contributes a short article entitled "Village Types." He says:

One of the most entertaining people in the village is the doctor, for, however closely he may be allied with his patient community, he must also be, to a greater or less extent, a man of the world. The time you spend with him will surely not be thrown away—unless, indeed, you visit him in his professional capacity; then it will all depend on circumstances. A doctor, in America, is very apt to have been a traveler; and, being an American, to have seen a great deal that the ordinary traveler misses. His knowledge of the inside of his fellow-creatures seems to assist him in observing facts connected with their external environment; he is comparatively free from prejudices, and his opinions upon things in general are dictated by solid common sense. His professional training tends to sharpen his insight into human nature, and, if his own nature be sociable and humane, he forms many agreeable acquaintances in all parts of the world. In the seclusion of his rural study, shadowed by the elm tree on the lawn, and rendered fragrant by the

lilac bush under the window, he cons over the latest discoveries of science, and meditates wisely and discriminatingly upon politics, literature and art. He is amiably sceptical, and he is cheerful by force of professional habit; you may interest and amuse him, but you can scarcely surprise him; and he will easily detect in you, and demurely satirize, any tendency to indulge in the Munchausen vein. He is not a wealthy man, and most of his fees are paid in commodities other than coin, when they are paid at all; yet he has enjoyed his life, and has the consciousness of having been of some benefit to his fellow-creatures, if only by removing them to a happier sphere. But, if he be the best man in the village, the reason is, it must be confessed, because he belongs to it only in the physical sense; his mind and faculties and his higher sympathies have a far wider range. He resides there because he was born there, and because a man who has surveyed existence in its larger aspect cannot do better than spend his closing years where his years began. Long life to the good doctor; and may his prescriptions never fail of the effect which Providence, in its wisdom, sees fit to endow them withal!

DR. CARL G. WEBER.

Professor Gustave C. E. Weber and family have our sincere sympathy in the loss of an only son and brother, Dr. Carl G. Weber, who died suddenly on the twenty-fifth of March, 1888, after a lingering illness of years. Dr. Carl G. Weber at the time of his death was twenty-seven years of age. He was educated at the University of Bonn, Germany, where his grandfather was professor of anatomy for so many years, and graduated from the medical department of the Western Reserve university in 1886. Coming from a family which has produced many distinguished *literati* and men of the highest professional rank, it was only natural to hope for him a career of eminence had he lived to achieve it.

New Books and Pamphlets.

'THE SURGICAL DISEASES OF CHILDREN.' By Edmund Owen, M. B., F. R. C. S., Surgeon to the Hospital for Sick Children, Great Ormond Street; Surgeon to and Lecturer on Anatomy at St. Mary's Hospital, Member of the Board of Examiners at the Royal College of Surgeons. Illustrated with 4 Chromo-lithographs and 85 engravings. Philadelphia: Lea Bros. & Co.

This is one of the series of 'Clinical Manuals for Practitioners and Students of Medicine.' It is a modest looking little book, but it contains 518 pages of very practical matter upon this important and interesting branch.

This is the period of life when the congenital and developmental defects and deformities present themselves and are best remedied. Also when certain diatheses, as the strumous and rachitic, effect gland, joint and bone changes of great interest to the surgeon. Paralysis in forms peculiar to childhood claims a share of attention, while injuries and accidents to children often give results far different from what we would expect in the adult. Diphtheria and croup may require tracheotomy or intubation, and the author has written as vivid a chapter on tracheotomy as it has been our good fortune to read. He is exceedingly conservative in his estimate of intubation.

We have an idea that the author could write a book two or three times the size of this and not waste words either. He has certainly made the most of the space allowed in this manual and produced a "complete monograph," as was designed.

'A COMPLETE HAND-BOOK OF TREATMENT;' Arranged as an Alphabetical Index of Diseases to Facilitate Reference and Containing Nearly One Thousand Formulæ. By William Aitkin, M. D. (Edin.), F. R. S., Professor of Pathology in the Army Medical School, Examiner in Medicine for the Military Medical Services of the Queen, Fellow of the Sanitary Institute of Great Britain, etc., etc. Edited with Notes and Additions by A. D. Rockwell, A. M., M. D., Author of 'Medical and Surgical Uses of Electricity,' etc. New York: E. B. Treat, 771 Broadway.

We often hear the complaint that works on the practice of medicine are too brief in the sections devoted to treatment. After an elaborate chapter on the history, pathology, eti-

ology, symptoms and diagnosis, complications and sequellæ of a disease, all that the author has to suggest on treatment will be compassed in a few lines. "I know well enough what ails the patient," says the practitioner, "his condition is perfectly obvious, but now I want to know what to do for him." Often the ordinary lines of treatment have been tried and do not prove satisfactory, and a man must multiply his alternatives—increase his resources. In such a predicament the 'Hand-book of Treatment' will be appreciated. One does not have to hunt through a treatise on principles and practice for what he wants, for here is a book devoted entirely to treatment. It is composed of the chapters on treatment taken from the latest edition of Dr. Aitkin's encyclopædic work on the 'Science and Practice of Medicine,' which chapters have been revised and rearranged, and give not only the experience of this distinguished author but also that of every known authority. It "has taken for granted that the practitioner knows what disease he has to cope with," and endeavors to furnish him with "the latest treatment recommended by the best authorities."

'TRANSACTIONS OF THE OHIO STATE MEDICAL SOCIETY,' held at Toledo June 15, 16 and 17, 1887.

A thin volume of 358 pages, nearly half of which is made up of lists of officers, auxiliary societies, constitution and by-laws, list of members, obituary notices, explanatory declarations, biographical sketches, etc., repeated *ad infinitum*. Of the remaining one hundred and fifty or two hundred pages devoted to original articles and discussions, much might have been omitted without any great loss to the medical profession. The volume is a fair index of the character of the work done in the society. The valuable time of the members is occupied in setting up schemes and grinding private axes, so that good, honest, original work is at a discount. No time is given for the discussion of papers, and frequently those who have gone to much labor in the preparation of papers for the society must be content to read them by title. We hope that some move will be made this year whereby so much valuable time will not be occupied in the transaction of unimportant business and more to original work, either by working in sections or by the election of an executive council who will have power to transact all the routine business without occupying the time of the society.

NOTES AND COMMENTS.

SECOND ANNUAL COMMENCEMENT.

Thursday, March 24, 1888, was a cheerful occasion for many friends of the Western Pennsylvania Medical college in Pittsburgh. The Grand Opera House was crowded with those on hand to extend congratulations and to aid in commemoration of the second annual commencement.

Thirty-four graduates received the degree of M. D.—being an increase of exactly fifty per cent. above last year's number. After the invocation, by Rev. Dr. Cowan, the valedictory address was delivered by Professor James McCann, president of the faculty; next an address by the first honor man of the class, Dr. W. S. Plotner.

In the evening, at the Seventh Avenue hotel, faculty, alumni and guests, to the number of one hundred and fifty, partook of some of the "good things" of life. The post-prandial toasts were responded to in the happiest way by Dr. Thomas McKennan of Washington; Dr. Stewart of Erie; Dr. Ferree of the class of '87; Dr. Botkin of the class of '88; by Professor Lange of the faculty; Joseph Albree, esq., of Allegheny City; Rev. Dr. Cowan and others. The reunion was thoroughly enjoyed by all, and fitly closed the second successful year of this new medical college.

BACK NUMBERS OF THE GAZETTE.

Anyone sending us the following three back numbers of the GAZETTE we will credit with one year's subscription, viz:

Volume I, No. 3, January, 1886.

Volume II, No. 1, November, 1886.

Volume II, No. 2, December, 1886.

Anyone sending us one of the above will be credited with three months subscription.

Wanted—A physician who can speak German to occupy an office in connection with a drug store on a good street in this city. No charge for office rent. A good opening. Address B., Medical Gazette.

Cuyahoga County Medical Society.—The following officers were elected at the last meeting of the Cuyahoga County Medical Society to serve during the ensuing year : President, Dr. J. D. Jones ; vice-presidents, Dr. D. P. Allen, Dr. A. R. Baker ; recording secretary, Dr. D. N. Hanson ; corresponding secretary, Dr. H. S. Upson ; censors, Dr. W. T. Corlett, Dr. A. B. Carpenter, Dr. C. F. Dutton ; trustee, Dr. C. C. Arms.

We regret that we are not able to accept the courteous invitation to the dinner tendered to Surgeon-General John B. Hamilton by the Alumni Association of the Medical Chirurgical College of Philadelphia, Pennsylvania, April 5.

We enclose a large number of bills in this number of the GAZETTE. We have been much encouraged by the large number of complimentary letters we have received during this year, and if all our subscribers remit their subscription promptly in advance we can still do better. A few are in arrears for one and even two years. Please give the matter your immediate attention. Remember that outside of Cleveland we have no authorized collector, and subscribers may remit directly to 145 Euclid avenue, Cleveland, Ohio.

A federation of the clubs and societies in Paris has been formed with the object of cheapening medical attendance. Adult members of the association pay forty cents a year for medical attendance, and children twenty cents.—*Ex.*

In the interest of health as well as economy, only pure teas and coffees should be purchased of the Great Atlantic & Pacific Tea company, 172 Ontario street, Cleveland, Ohio. Branches at 550 Pearl street and 2587 Broadway, and in all prominent cities from the Atlantic to the Pacific coast.

The faculty of the medical department of the University of Wooster have secured R. S. Sutton, A. M., M. D., of Pittsburgh, to give a course of lectures to their students on the surgical diseases of women, during the months of May and June. His professional duties at Pittsburgh will only permit him to be in Cleveland on Saturdays during these months. The lectures will be illustrated by diagrams and clinical cases. Lectures from ten to twelve, commencing Saturday, May 5.

—THE—
Cleveland Medical Gazette.

VOL. III.

MAY, 1888.

No. 7.

ORIGINAL ARTICLES.

**PARTIAL EPILEPSY (HEMISPASM)—COINCIDENCE
OF THIS SYMPTOM WITH HEMIPLEGIA—DIAG-
NOSTIC POINTS.**

BY PROFESSOR M. F. RAYMOND.

[Translated by D. N. Kinsman, M. D., Columbus, O.]

GENTLEMEN:—In my last lecture upon a case of cerebral syphilis, I spoke to you incidentally of partial epilepsy. I wish to-day to call your attention anew to that symptom so important to take into consideration, in relation to the diagnosis of the seat of encephalic lesions.

The young woman who is here before us has attacks of partial epilepsy; she came into the service of St. Madelene's ward, at bed No. 5, on the twenty-third of last September. Large, a brunette, she presents, as you see, the appearance of the most perfect health—and, in fact, an examination of all the organs failed to reveal anything abnormal; the appetite is preserved, digestion good, sleep is regular, the pulse is not frequent nor the skin hot. In conversing with her, one discovers immediately two important points:

1. The responses are very clear, very precise, but speech is a little slow, scanning. If she attempts to hurry her utterances, she stammers perceptibly. Meanwhile, the tongue is perfectly mobile in the front of the mouth; she has no fibrillar trembling; intelligence seems perfect.

2. The right side of the face remains almost motionless, while on the left the muscles preserve entire mobility, so that while the right commissure is paralyzed, the left is drawn up. The eyelids open or shut with great facility, either together, which is very commonly easily done, or separately, which demands a certain effort. There is no deviation of the eyes, nor visual troubles. There is, therefore, a slight degree of paralysis of the inferior facial.

When the patient tries to squeeze with the right and left hand alternately, a great difference is perceived. In the right hand there is but little force, in the left it is normal. The dynamometer shows the difference very clearly. The right arm may be raised, placed upon the head, etc. All these movements are slow and are not executed with the same facility as with the left. The patient cannot keep her hand elevated but a very short time, and during this time it is agitated with a feeble vertical trembling, with little oscillations—trembling which augments when a glass is placed in her hand. There seems to be a feeble stiffening of the arm in flexing the forearm. Tendinous reflex is a little more marked than normally. There are no disturbances of sensibility.

The right leg is much more feeble than the left. Meanwhile it is less paralyzed than the right arm. If she is made to sustain this limb, without resting upon the sole, for an instant, it becomes rapidly tremulous, otherwise little marked. Sensibility, normal; no spinal trepidation; tendinous and cutaneous reflexes a little exaggerated; no paralysis of the sphincters. There are no hysteric manifestations of any kind; the patient menstruates regularly and normally.

Born at Montargis, she has lived in Paris only five months. Her parents are living; without hereditary antecedents. She passed her infancy without any morbid accidents; but,

arriving at the age of puberty, she had not menstruated; her health did not otherwise seem to have been impaired. Being somewhat feeble at the age of sixteen, she abandoned the work of linen weaving, which was very fatiguing, for that of needle-work. She has never been nervous.

Six months ago, without any assignable cause or any premonitions, she was suddenly seized in the morning on arising with an apoplectic attack. After this, which has been related, she lost consciousness for five hours. When she came to herself, the whole of the right side was found paralyzed, absolutely incapable of any movement; at the same time she was without the power of speech; she understood well all that was said, but it was impossible for her to speak. Affairs remained in this condition for two days, when she regained the use of a few words. Since then gradually language has returned. In like manner the paralysis gradually diminished, and at the end of two months she was able to walk. She came to Paris with her aunt, where she remains, she says, to be nursed. The tremblings of the hand, when movements are provoked, came on some months ago.

This young woman relates—mark well these words—that one month after the apoplexy, she had, in the middle of the day, an attack which frightened her very much. All at once, after a temporary feeling of weakness, after a sort of tingling which passed over the face, the arms and the legs, she was taken with a convulsive rigidity of the muscles of these regions, a rigidity which determined the extension of the limbs; this extension was of brief duration; very sudden sharp shocks agitated the face, the arm and the leg on the right side. These phenomena lasted four or five minutes, the patient remaining completely conscious and powerless. She could not control the movements in the least. She never lost consciousness.

These attacks are repeated at indefinite intervals. They are excited, or rather they come on, without assignable cause. Slight excitement sometimes precedes them; at others, they follow walking and fatigue. They are almost always preceded by the aura described above. Remember,

there is never a cry, no intellectual disturbances, nothing, in a word, which appertains to ordinary epilepsy. Since the apoplectic attack, the menstrual flow, which till then had not appeared, has been all these months regular. These attacks have no relation to the menstrual periods.

Let us try to interpret these facts. They have great interest in connection with those which I pointed out the other day. What have we found to-day? A right hemiplegia, with facial paralysis and slight embarrassment of speech. Incomplete motor hemiplegia, without disturbance of sensibility, but a certain degree of contraction and trembling attending movement. The semiological value of these symptoms is precise, and enables us to affirm the existence of a circumscribed cerebral lesion, located in the left hemisphere. Can we, in this case, determine its exact location?

Other important considerations must be noticed in relation to prognosis and treatment. The attack has been sudden, overwhelming, resulting in hemiplegia, facial paralysis and aphasia. By reason of its sudden access, the intensity of its onset, absence of prodromes, we must suspect cerebral hemorrhage or softening. I do not think, indeed, there is any necessity of looking for pachymeningitis, meningeal hemorrhage or tumor of the brain. Not pachymeningitis, for there has been no diffusion of symptoms, those having remained clearly circumscribed, the prodromic period having been absent, the apoplectic attack having been sudden and complete. Not meningeal hemorrhage for the same reasons. Moreover, in taking account of the course of the affection, meningeal hemorrhage is almost uniformly fatal. Not a tumor, because there are none of the signs of pressure upon the cranial nerves, no disturbances of sensibility, no headache, hyperæsthesia, no dyspeptic troubles, vomitings, etc.; finally the return of speech and motion was slow and gradual.

I ought to remark that there exist in our science different observations in which there have been noted tumors at the level of the island of Reil, giving rise to similar symptoms to those existing in this young woman. I think, therefore, in *résumé*, having made this reservation, we ought to limit the

diagnosis between cerebral hemorrhage and softening. I shall, therefore, occupy myself with the seat of the lesion during this hour.

The patient is very young to have cerebral hemorrhage; furthermore, she has been aphasic, and still has a certain amount of difficulty in speech. As I told you before, aphasia is rare in cerebral hemorrhage. In admitting, on the contrary, the existence of a focus of softening, we explain much better all the peculiarities and their mode of evolution. We can locate the cause of aphasia in the base of the third frontal convolution, extending toward the rear in direction of the internal capsule. We can say this has been destroyed in part and has become the seat of degeneration, extending to the right lateral column of the spinal cord. The contraction and slight trembling of the arm in connection with voluntary movement testifies to this. I have already insisted strongly upon the value of this sign. The existence of partial epilepsy in our patient (hemispasm) strengthens the opinion which I have given. On this concomitant (hemispasm) I wish to fix your attention. I have spoken upon this subject lately, but it is too important not to occupy us a little longer.

You have seen the epilepsy in our patient is partial and conscious, to employ the expression of M. Fournier. This epilepsy was described by Bravais in 1827, in a work which Charcot has cited as a model of clinical analysis; was studied in a remarkable manner by Hughlings Jackson, more recently among us. Since the experiments of Ferrier have drawn attention anew to the subject, they have sought especially to determine better the exact seat of the lesions existing in these cases.

In France the works of Charcot, Bournville, Pitres, Fournier, Laudouzy, etc., have greatly served this purpose.

Recently, at the congress in London, MM. Brown Sequard, J. Hughlings Jackson, F. Muller (of Graz), Lasegue and others have newly studied this question.

Jackson, resuming his personal researches, has shown: 1st, that in almost all cases the spasm begins on one side, ordi-

narily in the hand by the thumb or finger; in the face, by the labial commissure or tongue; in the foot, by the great toe.

2d. He has consequently established three categories of epilepsy: monospasm, arm and face: hemispasm, face, arm and leg; hemispasm, with deviation of the eyes and head to the side convulsed. In the last category the muscles habitually act bilaterally.

Bravais had already established three varieties of partial epilepsy: epilepsy beginning at the head, epilepsy beginning by the arm, and epilepsy beginning by the leg.

Finally, Jackson has drawn from published observations the following conclusions: When the spasm is limited, or almost limited, to the arm, it may pass from above downward; very generally it moves from below upward. In hemispasm, the contraction of the superior member proceeds from the hand towards the arm, and of the inferior member from the thigh to the foot. If the attack begins at the great toe, the spasm mounts into the leg and descends into the arm. Rarely the convulsion becomes bilateral.

The order of contraction of the muscles is well determined.

First, there is spasm of the muscles whose movements are unilateral, these not taking place except on one side of the face, then the spasm generalizes itself upon the muscles of both sides, whose action is bilateral.

(Difference for each hemisphere in the representation of the muscles which act unilaterally, and in those which act bilaterally.—*Broadbent.*)

MM. Jackson and Muller have endeavored to point out the differential signs which enable us to distinguish symptomatic from idiopathic epilepsy.

These differences may be formulated thus: 1st. In Jacksonian epilepsy there is no cry. The patient remains conscious at the beginning of the attack, or in the entire attack, as in our patient, if it is limited to one side of the body. 2d. In partial epilepsy, the attack, with very rare exceptions, consists of clonic movements; the contraction, ordinarily very extended, begins by the same muscle or by the same group of muscles.

“ The more sudden the attack, the more rapidly it extends, the greater will be its intensity ; the longer the approach of the attack, the shorter will be its course and reciprocally.”—
(*Jackson.*)

Paralytic and ocular-papillary phenomena are very frequent in partial epilepsy.

After a limited convulsive attack there remains frequently a paralysis, sometimes temporary, sometimes permanent.

If the attack is general, the paralysis is on the side where the convulsions have been the most intense and on the side where they persist the longest.

Partial epilepsy, whose chief characteristics I have just given you, is, as you know, the sign of a local lesion in the encephalon. In our patient there is nothing more to discuss, for the reasons I have given you. We recognize we are in the presence of epilepsy pure and simple. This epilepsy is symptomatic. Therefore we are led to a cerebral lesion by Jacksonian epilepsy.

Many times in these conferences or at the amphitheatre I have described what has been called the cortical motor zone.

MM. Charcot and Pitres, in their very remarkable memoir, have shown us in cases of partial epilepsy the constant, invariable presence of divers alterations of the gray substance occupying the nutritive regions of the fronto-parietal convolutions.

We must admit inevitably a lesion of these regions. We have been already conducted to it by taking into consideration the aphasia and the hemiplegia.

The lesion is superficial, and it has extended to a certain depth ; at the same time, probably, the meninges are participating at the site of the lesion with the cerebral alteration.

We have in this case a cortical lesion, characterized at the time by two orders of symptoms—convulsions and paralysis.

Remember that in paralysis of cortical origin the hemiplegia may resemble perfectly hemiplegia of cerebral origin—and this is the case in our patient. Secondary descending degenerations are produced sometimes (Charcot and Pitres), but

then they never take place when the seat of the cortical lesion is outside of the cortical motor zone.

I have established on one hand that we are probably in the presence of an extended cerebral softening; on the other, that it occupies the motor zone, and also it is superficial.

We may suppose that it is not beyond possibility that the softening in cicatrizing has caused inflammation of the cerebral envelopes, creating a sort of partial meningitis, doubtless yet in process of evolution—meningitis of which the Jacksonian epilepsy is the symptom.

I have not had, in the course of this lecture, to discuss the existence of hemiplegia from a syphilitic cause, because there is not a trace of this disease in our patient, and because the hemiplegia has not the characteristics of syphilitic hemiplegia.

Recall to mind our patient of the other day. I have not thought it necessary to speak of hysteria, the patient never having presented any attribute of a nervous temperament and the paralysis not resembling, either in its actual state or evolution, hysteric hemiplegia.

It is very difficult in this particular case to recognize the cause of cerebral softening.

Did it come from embolism? The peripheric arteries are perfectly sound; the heart is normal. Did it arise from thrombosis? If the last hypothesis is true, we cannot indicate its pathogeny, because before the apoplectic attack the general health had always been good, aside from the non-appearance of the menstrual flow.

It is very singular to see it established after the paralysis. What is the link which unites these two orders of phenomena, supposing one to exist? I am not able to tell.

Our patient, therefore, has an incomplete hemiplegia from cerebral lesion.

Is the hemiplegia curable? This is the question of importance in the prognosis.

If we take into consideration the evolution of the accidents, since six months ago the paralysis was almost complete and now the patient walks, one would think the paralysis might

disappear completely ; and as the woman is very young, as there are no lesions of the vessels, we should not expect a new attack of cerebral softening ; but there has been, let us not forget, a distinctive lesion of the brain, a lesion accompanied with actual degeneration, across the pons vavolii and the medulla to the lateral column of the cord.

It is to be feared, for that reason, that the hemiplegia may be only curable to a limited extent ; but, furthermore, the persistent partial attacks of epilepsy indicate without doubt the persistence of a feeble degree of inflammatory action in the meninges.

The treatment, in view of the work to be accomplished, does not bring a long series of therapeutic means. I would give a gram of potassic iodide daily, hoping to act upon the inflammatory products which I suppose have formed upon the meningeal surfaces.

Further, I would make daily stimulating frictions upon the diseased limbs (frictions with soap liniment). When the signs of cerebral irritation have disappeared, I would employ electricity by induced currents, making very short applications, as recommended by M. Vulpian.

The muscles should be electrized individually, taking care, as there is a little contraction, not to direct the current upon the antagonists of the contracted muscles.

Later, I do not think it necessary to employ the continuous currents—"whose action is much more penetrating and which may modify, even when they are not very intense, the circulation of the nervous centers."—(*Vulpian.*)

AN ADDRESS BEFORE THE ALUMNI ASSOCIATION OF MEDICAL DEPARTMENT OF WESTERN RESERVE UNIVERSITY, MARCH 7, 1888.

BY G. C. ASHMUN, M. D.

IN a day when civilized people are especially susceptible to and appreciative of the discoveries and applications of science, and the faculty of imagination is stimulated to the utmost in every field, it is not to be expected that facts and principles in medical science, even long known and established, will appear to satisfy.

The well-earned scientific achievement is accompanied by *pseudo-science*, with *pretense* as its representative. Every advance which excites wonder and admiration because of its revelation of hitherto concealed laws or methods, but opens a door for the entrance of demons which fatten upon the bodies and souls of the credulous. In this there is but an exhibition of the natural tendency of ignorance to gape and strangle over simplified truth and swallow with ease, as a choice morsel, the untruth or half-truth which has no better flavor than mystery. And it is a common observation that, when the devil of half-truth has entered into a man, there is a sore rending of all his fibres, if it is ever dislodged. The truth is thereafter not welcomed—the former tenant out, there is but a scant lodging-place afforded for a clean, sweet, wholesome truth which could give comfort and strength. And it is one of the interesting phenomena of the age that a certain intellectual cultivation or ambition—a sense of defects and aspiration for higher attainments—should lead many to a low estimate of the value of exact knowledge in the field of medicine; or should lead others to attempt a sub-structural division of man, leaving him to appear whole, while to *their* minds his body and soul are entirely separate.

Unquestionably, the past, the present and the future standing of medicine, among sister branches of science and endeavor, has been and will be dependent upon those who represent and apply it. But dealing, as it must from its

nature, with the innermost personality of men, it receives the direct influence of caprice, fashion, temper, together with the horde of dishonest and ignoble motives which so persistently discover our human nature. This but develops the necessity for a clear appreciation of responsibility. How shall the field and scope of an honest, honorable, scientific application of knowledge in all that pertains to medicine be maintained? We all believe—yes, even those who have seen shallow pretense occupying the place and prosperity to which real knowledge alone was entitled—we all believe there is in medicine a place for the highest endeavor intellectually—the purest motives, the most beneficent action. Further, we believe that this branch of scientific inquiry and application has a place among men which cannot be filled by any other. Like electricity, it has a natural monopoly in certain life interests and channels, which cannot be reached except by the study which medicine involves. It may be true that something of every other department of learning may be utilized in medicine, yet the very idea and spirit which has inspired the minds of men to search out hidden causes and effects in this field has isolated it to a marked degree in the application. And in presenting and applying all knowledge which secures the highest development of man, in structure and function, or assists either when impaired, medicine finds its right to exist as a monopoly in certain human affairs. It cannot safely tolerate any entanglements and combinations or its exclusive privilege and function will vanish. Nor can any legal enactments, however well they may be prepared or applied, protect the essential interest involved. For medicine must rest and depend for recognition upon its supplying to the world what is needed and what can be found nowhere else.

Can it do this? And how?

By bringing to this institution, and to all similar ones dedicated to this high purpose, in the best forms and by the best methods, the results of experiment, experience, observation and research, and here so broadly and deeply and rigidly instructing and impressing the minds here gathered, as that

no unworthy representative of scientific medicine shall pass out to the world. Every generation of men has its peculiar demands, and that of to-day in regard to medicine is that it shall admit and embrace every agency which can prevent, cure and relieve disease and lengthen the period to men of active employment. Any personal ambitions for wealth or distinction, which are not subordinate to the best interests of such an institution in teachers or instruction, must be counted as dangerous obstacles. Any prejudice which prevents the admission of new discoveries or methods, or jealousy which keeps away teachers of wider advantages, or the teaching of specialties, to the exclusion or neglect of the general principles and elements which alone can give stability, will in so far prevent the fullest intention and demand of the medical institutions of the day.

This institution, which has done so much on so little in the past, now appeals to those who have received her benefits to aid in bringing the enlarged opportunity she affords to the knowledge of those seeking instruction. The alumni can, without any sense of humiliation, now urge the claims of this institution upon students, with the assurance that the demands of the day upon scientific medicine can here and now be supplied. We have all heard how low an estimate has been placed upon the attainments of the average American medical graduate by our friends in Europe. We have heard it and admitted the element of truth in it, but there is no longer excuse or reason for even a grain of truth in such an estimate. If these institutions take rank and command support as they may, by making their standard of qualification for admissions and exits a guarantee of attainment, no graduate here need fear belittling in contacts abroad. The fact, however, appears to have been that knowledge abroad has in this field exceeded that gained in institutions here, not so much in the practical and directly useful in medicine, but in those branches which fortify and deepen the mind, train the faculties to grasp, hold and elaborate principles and methods. This is simply a phase of the relation of an old country to a new one—a matter of

development. But McDowell of Kentucky and many another practitioner in the new world, under the stimulus of an emergency, developed resources and attained results which even Billroth, in the removal of the pylorus, under the advantages of the day, has not eclipsed. All acquirement in ancient and modern languages, in biology, in philosophy, history, geology, mathematics, theology and demonology would never have prepared McDowell for ovariectomy. But with all such and other aids, ovariectomy in his hands might perhaps have more nearly approached the successes of to-day. And thus to add and build on best of native mould presenting, will give us representatives worthy the science which stands guard over human life. The university of which this is a department has languished and shown little attractive virility for some years, but now, with a new head and infusion of harmonious blood, it is probable that some revivifying influences will be felt. The recent course of popular lectures is a step toward bringing the fact of such a source of pleasure and education to the minds of people. Lectures adapted to the people, and which would instruct them in the application of science to their preservation and relief, would do much to bind the people and institution together. This city now has a greater population than that of the entire Western Reserve when this institution was opened. And in order that medicine, as represented here or in the persons of those graduated here, shall have rightful recognition and appreciation, some effort can well be repaid by opening the doors in a measure to those who care to learn but cannot take systematic courses of study. Who of us has not seen with amazement and delight the well-applied *domestic* remedy by those who never could understand the pathology or therapeutic principles involved, but who could remember the kind and faithful instructions for its use from some family physician? And sound scientific ground and principles need never fear cheapening by making plain such practical applications as may be serviceable or interesting to the non-scientific.

The relation of the state to the educated physician, and

physician to the state, is an interesting one, as showing the position of medicine in human affairs at this time. Without entering into a discussion and extended question of the office and function of the state toward all citizens, or whether the state and tendency of the time is not in danger of considering people too much in "classes," with "class" rights and privileges, it is well for us to review some of the peculiar and unavoidable responsibilities resting upon educated medical men among their fellow-citizens.

The state, geographically, entails for the medical student a knowledge and estimate of effects produced upon its people by its climatic influences, the character and products of its soil, its fitness for the habitation and development of men. While, politically, and in all the relations of citizens by which they constitute "the state," medicine has in its keeping some of the most vital and essential interests.

Under our system of government, which has such possibilities for success or failure in self-government, "the state" is intended to be the *people*, concentrated into certain representatives and laws. Not only the so-styled "inalienable rights" of man are supposed to be provided for, but the provisions for advancement in education, ethics and æsthetics are freely furnished. And as we cannot have a political state without people, so no state can be long stable and contained unless its people are in condition for performing the necessary labor to supply their bodily necessities. And it is alone from the studies embraced in the science of medicine, directly or indirectly, that states are able to support and defend themselves, obtain the information which keeps the brain clear and the hand strong to do it.

From the conception to the dissolution of each citizen element which makes any civilized state a power in the world's affairs to-day, it is medical science which has aided and largely guided the physical result. Perhaps in another channel the obligations of the state to medicine is even greater by the information given respecting contagious epidemic diseases, their methods of propagation and extension, and by pointing out ways of averting and limiting. The state looks, with a

right to demand of medical science, that it shall be able to detect, disclose and prevent these dire and destructive diseases, and holds to relentless account any error which admits a danger in this channel. Time and space would fail to enumerate the responsibilities resting upon us as medical men in the various relations of life, in which not only life and health but the most important material interests hinge upon their accurate scientific knowledge and its equally accurate application to the affairs of men.

To educated medical men representing scientific medicine of our time, the state owes: First—What it guarantees to all other citizens as defined in constitution, bill of rights or other compact made by all for all; and, second, such especial recognition in laws and courts of their especial field of usefulness and learning as that medicine as a science shall not be degraded or belittled. Of course this second claim is difficult to define and adjust. But is it not simple equity, in view of the service rendered and the relation and responsibility imposed, that graduates from institutions like this be so recognized by law that on the witness stand in court they shall not be subjected to a half-intelligent “quiz” by a legal “cram” as to what they know about medicine?

It may or may not be wise to legislate to secure educated medical men a chance to collect their bills as compared with the ignorant practitioner upon the fears and credulities of people, but can the state afford to permit *anything* which impairs the usefulness or advancement of medical science on the one hand, or the safe confidence of people in educated medicine, on the other?

It is often charged that the doctors of the so-called “regular” school in medicine would be glad to limit the practice to those who thought and practiced as they did. And this may have been in the minds of some in their efforts to secure legislation. But I am sure it does not reflect at all the sentiments of broad-minded men. What all would ask is, that a fair opportunity be given people to know whether one claiming to be a thoroughly educated man in

this branch of science has any ground for such a claim. And if there is anything in which the people—not the doctors—are entitled to protection from the state, it is in this field of medicine, and as against fraud entering through doors left open by an angel of light.

It is unfortunate for the standing and appearance of medicine among others than students that differences of opinion among medical men as to diseased conditions and their treatment should be placed before those entirely unprepared to understand or appreciate them. Whether anything can be accomplished to prevent it when the patient is a president, a crown prince or a prominent citizen in small city, is doubtful. But each man for himself, in so far as he is a representative of medicine, can let the curtain of silence cover and keep such differences in proper channels. For the injuries we inflict upon medicine in this way come back upon ourselves, and usually when we are least prepared to meet them.

Not long since I was told by an intelligent lawyer that, in so far as he could see, medicine was not keeping up with other branches of science in this progressive age. It was merely a ray of light from the outside, but helped to show how much danger we are in of thinking others must see from the outside what is clear to us who are within.

Medicine is now prepared to do more for the world than ever before—in prevention of disease, in knowledge of causes, in methods and materials of treatment, in overcoming fraud and deceit by presenting a rational basis for doing the best that can be done by anyone for the physical relief of men. And in saying this there is neither space nor sentiment of conceit for ourselves, but a just demand that in this day of *immaterialism* we neither allow ourselves or others to forget the past, ignore the present, or destroy the future of the science which has rightfully in its keeping so much of human good or ill.

A proposed change in the drachm mark.—Dr. C. M. Taylor of the *Medical World* of Philadelphia proposes to substitute for the drachm mark (ⶑ) now in use, and which has always been objectionable on account of its close resemblance to the ounce mark (ⶑ) when written, as is usually the case by physicians, *currente calamo*, a mark similar to, or identical with, the Greek delta (Δ). The advisability of such a change has no doubt presented itself to every practitioner. The necessity of some such change has, according to the *St. Louis*

Medical Journal, been forcibly illustrated by a case which has recently come up in the courts of that city. A certain Dr. Parker gave a patient a prescription for a certain amount of chloral in solution. The prescription was propounded by a druggist named Sohn. When the patient took the first dose of the medicine he immediately developed symptoms of acute chloral poisoning, and summoned Dr. Parker, who had considerable difficulty in saving his life. After recovery, the patient refused to pay the doctor's bill, on the ground that the latter had made a mistake in writing the amount of chloral. The doctor then brought suit against the Mr. Sohn for the bill on the ground that the druggist had erred in putting up the medicine ordered, and claiming that when he had ordered one $\bar{3}$ Mr. Sohn had put up one $\bar{3}$ instead. At the trial Mr. Sohn produced the original prescription, and showed that it called for one ounce instead of one drachm. The doctor now claims that the prescription has been tampered with. And the end is not yet.

VESICO-VAGINAL FISTULA.

BY REUBEN A. VANCE, M.D., CLEVELAND, OHIO.

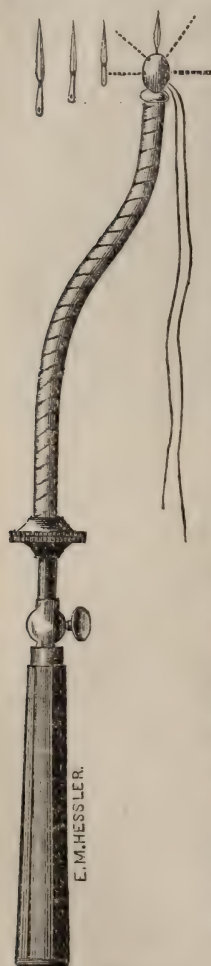
(Continued from page 231.)

THE needles used in this operation must be of such shape as to readily pass through the tissues to be united, and of such size as to permit the loop of thread they carry to convey with ease the wire hooked in its extremity. They may vary in length with the peculiarities of each case, but the above requirements are essential to them all. After experimenting with many different patterns, the one I like best is that known as Bozeman's needle, and shown in figure 6.

The best needle carrier is one devised by the same surgeon. Its great advantage is that it does not fill the vaginal outlet with a bulky handle, thereby interfering with vision, but permits a full view of the parts while the needles are being passed. Its peculiarities are well represented in figure 6.

The crutch on which the threads are supported plays an important part in this operation. If the threads were drawn upon at the vaginal outlet in order to pass the wire, the tissues would be cut through. The crutch is passed into the

vagina and supports the threads at the point they emerge from the fistulous margin: the threads are drawn tense, and



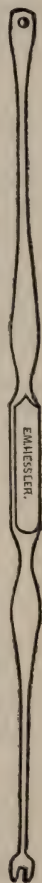
then, by successive elevations of the crutch, the threads are passed and the wire drawn through, without the slightest danger of tearing the borders of the fistula.

At the end of the crutch made for me by Mr. Hessler, and shown in figure 7, is a ring, the stem supporting which is flexible. When the wires are in place and it is desired to "shoulder" them as illustrated in figure 2, this ring is passed over each suture in succession and pressure made against the fistula while the extremities of the wire are drawn taut. In this way the edges of the fistula are apposed and the wires properly bent so as to hold the margins in place and prepare the part for the button. The flexible stem of the ring permits the instrument to be bent into any shape necessary for the satisfactory completion of this essential step in the operation.

The button has been illustrated in describing the procedures adopted in the second case. Figures 2 and 3 show it on its passage down the wires and after it has been finally settled in place. It is formed of sheet lead about the twentieth of

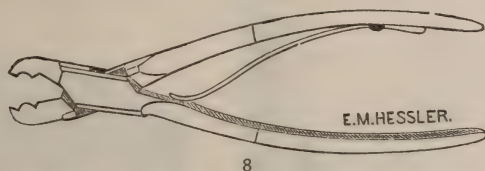
an inch in thickness and is moulded into form with a button-shaper—an instrument represented in figure 8.

It is impossible to convey a true idea of Bozeman's operation without describing the so-called chair he employs to support the patient and the speculum he uses to expose the fistula. The latter is essential; the former very convenient. In the *New York Medical Journal* for February, 1869, he



figures and describes both. From that article I have copied some of the illustrations appended, and to it I am largely indebted for the following description: What is known as the chair is in reality a supporting and confining apparatus for operating upon a patient in the right angle position upon her knees and chest. The position is an old one—having been proposed by Roux many years since—but its peculiar advantages are only enjoyed when the patient is supported by an apparatus of this kind. In the use of this device three principal objects are to be attained:

1. Extension of the vertebral column and relaxation of the abdominal muscles, essential to free gravitation forward of the pelvic and abdominal viscera.



2. Support and mechanical confinement of the patient by controlling muscular action at certain points without encumbering the abdomen or interfering with the functions of respiration and circulation.

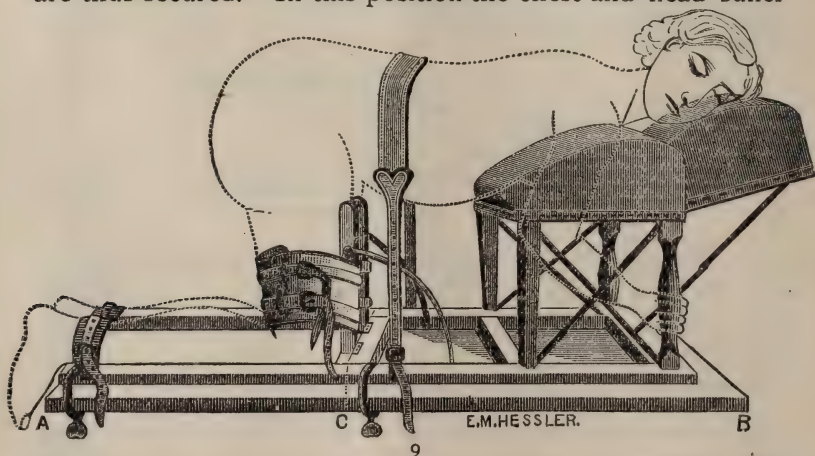
3. The safe administration of anæsthetics.

In construction the apparatus is simple and strong; it is light, weighing less than twenty pounds; is very portable when folded up; and may be placed for use upon any table, to which it is made fast by the weight of the patient and a pair of small clamps. Figure 9 illustrates the apparatus in use. The whole figure is exposed in order that the relations of all parts may be seen. It is needless to say that no such exposure is necessary in actual practice.

The apparatus, as may be seen, is placed upon and secured to the table, A. B. The patient first kneels upon a couple of cushions, the thighs being perpendicular to the table, and received against the two upright splints held in position by the corresponding braces. Around each thigh and splint is placed a pad, over which are buckled two strong straps to

secure the whole. In a similar manner the ankles are confined. The lower limbs thus arranged and secured, muscular action is effectually controlled.

The patient is next required to bend the body forward until the chest and head are received upon their appropriate supports; she then voluntarily extends the vertebral column, which position is maintained by the long girth seen passing across the loins. In this way she is deprived of all power to raise the body from its support, or otherwise to make any effective resistance. Relaxation of the abdominal muscles and gravitation forward of the pelvic and abdominal viscera are thus secured. In this position the chest and head suffer



no restraint. Respiration and circulation go on smoothly. In short, the entire body is easy and comfortable, and the patient can remain for hours with as little fatigue as upon the back. Anæsthetics can be given with safety in this position—in vomiting no ingesta are liable to reach the larynx, and no delay need be experienced from apprehended strangulation.

When the patient is disengaged from the apparatus it is doubled up, the hinge-joint C being placed near its middle for the purpose. The head-support, attached by two hinges and held in position by a brace, drops down as soon as the latter is removed, and is placed beneath the chest-support, to which it is fastened. The two supports are thereby made to stand back to back, occupying the least possible space.

When thus folded up and set upon the floor the apparatus resembles somewhat an ordinary chair—and from this resemblance the common but misleading name of “Bozeman’s chair” has doubtless originated.

One great advantage of this supporting and confining apparatus is that it enables the surgeon to carry out all the details of the preparatory treatment with but one assistant, and that person not necessarily a physician.

Bozeman’s speculum is essentially a dilating bivalve to which a third blade can be added when the instrument is in place and expanded. This third blade is separate from the main part; it is about four inches in length, one in width towards its point, and one and a quarter at its outer end where there is a short end or handle an inch and a half in length turning upward at an obtuse angle. It is thin and slightly flexible, and is bent to suit the curves of the posterior wall of the vagina, to which it is firmly applied from the perineum to the posterior cul-de-sac. To the under surface of it, near the outer end, is attached along the centre a small triangular plate, the base presenting backward and the apex forward, with a flange on the side edges. These grooves or flanges are intended to guide the depressor to its proper place when received upon the projecting arches of the speculum previously introduced into the vagina and expanded. The arrangement is such that the depressor can be slid in upon the projecting arches at any stage of expansion, and in that relationship is securely held by the resistance of the perineum and the recto-vaginal wall.

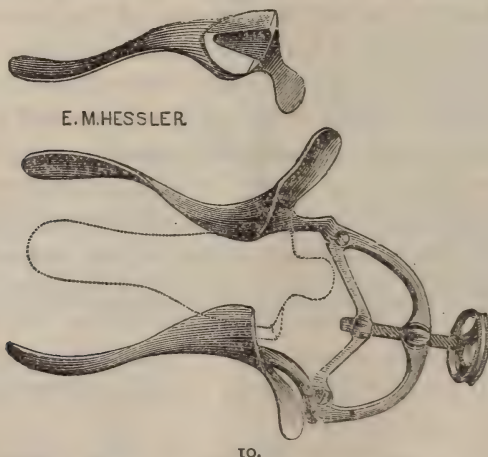
Figure 10 is a one-third size and a three-quarter view of a medium Bozeman speculum. The instrument is represented partially expanded. The dotted lines in front and between the expanded or flaring blades are intended to show the shape and position of the third blade for supporting the posterior wall of the vagina. The relationship of it to the projecting arches of the main part of the instrument is very clearly shown. The accompanying edge view of the same represents very well the curves described and the peculiar mechanism of the triangular plate on the under surface of it.

Bozeman sums up thus the principal peculiarities of this instrument:

1. "The system of leverage employed, which gives us increased power over increased resistance.

2. "Transverse dilation with uniformly varying movement of the blades, which gives us a thin and favorable form of the points for introduction, and a reversal of the size of the two ends of the instrument when expanded within the vagina. By virtue of this *flaring expansion of the blades within the ascending rami of the ischia* the instrument is made *self-retaining*, which distinguishes it from all others of this class previously constructed.

3. "The *elasticity of flexure* belonging to the working point of the instrument, which gives it an easy adaptation to the soft parts, both in the vagina and at its mouth. This is



also a feature of the instrument that particularly distinguishes it from other valved specula heretofore in use.

4. "The applicability of it in all positions, and the advantages secured to the physician or surgeon of making all examinations, or of doing all operations required upon the vaginal walls and cervix uteri without the aid of assistants."*

In describing the two foregoing devices, their illustrious inventor is naturally anxious that those who study their

* *New York Medical Journal*, February, 1869. Page 491.

mechanism and practical working should by no means overlook the peculiar merits of the suture he introduced to the profession in 1856. For this button suture, composed of a leaden plate silver wire and perforated shot, he formulates the following claims:

1. Separate and independent action of the sutures.
2. Perfect coaptation of the edges of the fistula, and power to hold them in a certain relationship during the reparative process.
3. Perfect steadiness and support of the edges of the fistula.
4. Protection of the denuded edges of the fistula from the vaginal and uterine discharges, and from the urine, when there happens to be more than one opening, and it is not convenient or desirable to close both at the same sitting.

In order that a patient suffering from vesico-vaginal fistula may be subjected to operation according to this method with every advantage in her favor, it is essential that certain preliminary steps be taken. This is a preparatory treatment that has for its main object full dilatation of the vagina. As Bandl has well said, this is not a question of incisions, of which others make use, to render accessible a fistula obscured by cicatrices; nor is it a question merely of the dilatation of a contracted canal, for this step must be taken by all who would reach an opening in the septum when the vagina is deformed by scar tissue. Bozeman starts upon the principle that the united surfaces are to be exposed to as little tension as possible from surrounding structures. To this cause he ascribes a great proportion of the failures in fistulæ which often seemed quite simple, and endeavors to search out by eye and finger every cicatricial band and thickening of tissue, and to do away with them. To accomplish this end, incisions must frequently be conjoined with dilatation, while dilatation must be accompanied by measures that will tend to heal the excoriations and remove the deposits of sabulous material that complicate these cases. I find that frequently repeated injections of large quantities of hot water has a soothing effect upon the irritated parts and materially expedites the dilatation. Nitrate of silver alone seems adequate

to dislodge deposits of limy material and cause the excoriations beneath to heal. The judgment of the practitioner charged with the management of a case will occasionally be taxed to the utmost to put his patient in a favorable condition for this or any other operation, but if Bozeman's plan is to be adopted, an absolute prerequisite is full dilatation of the vagina. During the preparatory treatment the patients become accustomed to the position in which subsequently the operation will be performed, and when we give a moment's thought to the difference between the Simon, Sims and Bozeman position, it is evident how much the latter, of itself, tends to vaginal distension. Simon placed his patients on their back with the buttocks elevated; Sims on the left side; but Bozeman, in the right angle position on their hands and knees. In the latter situation there is a forcible tendency to vaginal distension, due to the gravitation forward and downward of the pelvic and abdominal structures—a phenomenon that renders its effect manifest in those cases where there is prolapsus of the anterior bladder wall. In a short time this may cease, and the improvement be due entirely to the influence of posture.

The proper treatment of the second fistula—the vesico-utero-vaginal opening—in case 2 is a question of much interest. Such lesions were formerly overcome by obliterating the communication between the vagina and uterus: the vesico-uterine opening remaining untouched and the patient subsequently menstruating through the bladder. This plan was the one first recommended by Jobert, and in a case somewhat similar to that of Mrs. McManamon, was carried into effect in the Woman's Hospital of New York, by Dr. T. A. Emmet, in 1863. A glance at the procedure adopted by the writer will show that his operation—based on the necessities of the case—is unique. Its value as an operation can only be determined by further experience in similar cases.

A few words as to what is sometimes called the *linen* test. Bozeman many years ago pointed out the fact that pus and mucus in small quantities adhere *to* and spread *upon* the surface of a piece of linen without being absorbed by it,

while water or urine, on the contrary, even in the minutest quantity, when brought into contact with the same material, penetrate almost instantly the entire thickness of the fabric. The presence of these fluids, if the flow be constant, is evidenced by increasing saturation of the spot acted upon, and the spreading of the moisture in every direction. Thus is presented a most valuable and reliable means of determining the presence of urine in the vaginal or uterine canal when the quantity is so small as to escape observation; not only this, but the precise situation of its escape from the bladder can be made out with the greatest certainty, when it would be impossible to detect it by the ordinary means, owing to the minuteness of the orifice, or its concealment by a fold of mucous membrane. In Mrs. McManamon's case the linen test was employed to determine the absolute closure of the fistulæ: had there been the slightest dribbling of urine into the genital passages, this test would have revealed it—the linen coming out dry showed beyond question there was no communication between bladder and utero-vaginal canal remaining.

As has already been indicated, had the operator been accustomed to employ Simon's methods alone, and unfamiliar with Bozeman's instruments and devices, it is not improbable he would have considered vaginal obliteration imperative in the first case, and very clearly indicated in the second. The details of these cases reveal the reasons why Simon's implements and procedures incline to the one rather than the other. It is, in the writer's opinion, not the least of Bozeman's merits that he has enabled the surgeon to restrict to the utmost Kolpoplekisis, and by his ingenious instruments and methods, made genital renovation possible in innumerable cases of fistulæ that otherwise would have been condemned to vaginal obliteration.

CORRESPONDENCE.

Editors CLEVELAND MEDICAL GAZETTE :

ST. LOUIS, MISSOURI, April 5, 1888.

Dear Sirs : Your valued journal comes to hand regularly, and I take much pleasure in the perusal of its pages.

During my four months' sojourn in this metropolis, I have had ample opportunity of confirming an impression for several years entertained, viz., that it is truly a great medical centre, representing as it does seven medical colleges (five regular, one eclectic, and one homœopathic) and twenty-one well-conducted hospitals.

The profession of this city has among its numbers many eminent specialists and authors, whose ability as such is known to the world.

Having read in various journals of the remarkable success of Professor A. C. Bernays as an operator, and of his originality in devising new methods, I was particularly desirous of meeting that gentleman, and of witnessing his mode of procedure ; and I must acknowledge that he surpasses my most sanguine expectations. It is apparent to the most casual observer that he is not only a thoughtful and painstaking surgeon but an anatomist of the highest order. The fact that he was for many years a pupil of the renowned Gegenbaur of Heidelberg is sufficient guarantee that he has the groundwork of surgery well developed in his mind.

Among Dr. Bernays' cases of unusual interest, and which I have had the pleasure of witnessing at the various hospitals, I will cite two Porro operations and two supra-vaginal amputations, with recovery of two of the patients ; seven laparotomies, five for ovarian disease, with the recovery of all ; one for gun-shot wound of the abdomen, in which there was a perforation of the intestine in three different places, recovery ensuing ; one for malignant stricture of the pylorus, this last case, as expected, terminating fatally. A case of

retro-peritoneal tumor—fibro-cystic in structure—of eighty-one pounds, actual weight, upon the removal of which the patient made a rapid and uninterrupted recovery, attracted considerable attention from the profession generally.

Sanitary reform here in St. Louis is carried out in a very thorough and stringent manner; for instance, it is incumbent upon physicians to report even so apparently trifling an ailment as chicken-pox. However, as the health department bountifully supplies the profession with postal cards for the reporting of deaths, births and contagious diseases, the trouble of this task is reduced to a minimum.

Although a much larger city than Cleveland, and consequently a greater business centre, St. Louis can in no wise compete with the Forest City for beauty; even our Lindell avenue is a mere lane when compared to your Euclid.

Very truly,

IRWIN C. CARLISLE, M.D.

No. 1115 Vandeventer avenue.

The Cleveland Medical Gazette.

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EDITED BY A. R. BAKER AND S. W. KELLEY.

EDITORIAL.

MIDWIVES IN CLEVELAND.

WE presume Cleveland is no more favored than other cities of our state in regard to the number and qualifications of her midwives.

But in a state where there is no legislation to regulate the practice of medicine, it is not to be expected that midwifery will be very closely looked after by the law. Anyone who chooses may call himself a doctor, and anyone who chooses may call herself a midwife, stick out a sign, and is pretty sure to get something to do, especially if the sign be in any other language than United States. Midwives are not much employed by American born people, but do a large business among our foreign population, which includes eighty-two per cent. of the whole. There are in the city nearly fifty midwives, mostly German, with a number of Bohemian and a few English. As to qualification, nine-tenths of them have no training whatever, and too many of them have not the

recommendation of habits of common decent cleanliness. A large percentage of the cases of puerperal septicæmia which occur in the city are in the practice of the midwives, and innumerable instances of mismanagement and malpractice occur which never meet the light of investigation, as one may fairly judge by the occasional cases that do come under the observation of physicians. One night recently, being summoned to a case where, as the messenger said, the patient had "been three days and nights in labor and the midwife could not get the baby," we found the state of affairs as follows: The midwife kneeling in the middle of the bed between the patient's knees and at work with both hands in a manner suggestive of a terrier burrowing after a rabbit; the woman begging for a moment's rest; the midwife urging her to bear down and she would get the baby herself without any doctor. It was not necessary to have any doctor, she could soon get it through herself. A wash bowl of dirty and bloody water stood by. One of the women in the room offered to empty it and get some clean water. The midwife answered that it was not worth while, that was "plenty glean enough for dis pisness." We found the patient with a dry, hot skin, pulse weak at 140. She said the midwife had protested against the doctor being called, but that she would not stand it any longer. That the midwife said it was "not coming right, or that if it was the head it had no bones in." Upon asking the midwife what the presenting part was, she said it was "someding dot was not de het." What was it? Well it was "not right." The patient said she was not having any right pains any more, it was a pain all the time. Examination showed the uterus in tonic contraction. Upon inquiry as to whether medicine had been given, it was elicited that Fld. Ext. of Ergot had been given in a teaspoon in the morning and again on the evening previous—it was now past midnight. The presentation was a breech, with the child's right hip above the mother's pubis and left hip lodged at the promontory of the sacrum. The child's anus was sufficiently patulous to have admitted two fingers, was lacerated and bleeding freely. Without difficulty we pushed the trans-

verse diameter of the child's pelvis into an oblique diameter of the mother's pelvis, and by hooking a finger into the groin for traction and making pressure over the uterus through the abdominal walls to prevent the head extending, the child was extracted in a few minutes. The woman was a multipara and the perineum offered no impediment. The child was dead. The placenta, probably long previously detached, was withdrawn soon afterward. The cord for two or three inches from the umbilicus, where it came within reach of the midwife's talons, was shredded. The anterior lip of the uterus was also lacerated numerously by the same cause. The child's buttocks were bruised, blue and bleeding. The midwife had labored frantically to get hold of something to pull by.

This is but a single illustration of some of the work of our midwives, and many of our readers will recall a number of similar instances which they have met. And who can doubt that such methods of practice have done and do immense damage that is never debited where it belongs. This old hag piously exhorted the family to bear the baby's death patiently, as "what God sends we must take."

Now for another feature of the case which this particular instance will also serve to illustrate. It came to light subsequently that the midwife had, on the day previous to our being called by the family, had "her doctor" come and examine the case. This gentleman assured the patient and family that everything would be all right, that the midwife was perfectly competent to take care of her; they must have patience, that was all.

We have among us physicians who have an understanding with one or more midwives, and countenance and support all their doings, while the midwife on her part induces the patient to call in "her doctor" where the exigencies of the case demand more help.

What is the duty of the physician meeting one of these cases of malpractice? To refer the case to the coroner and let it go into the hands of the prosecuting attorney? Doubtless, if such a course would secure a conviction and put a

check to such criminal practices, it would clearly be his duty to take that course, although it would involve him in a dirty lawsuit and a great deal of annoyance. But the chances are very small that a conviction would result. It would be argued in defense, for instance, in the case we have used as an illustration, that still-birth does occur inevitably in a certain percentage of breech presentations, and we could not prove anyway that the child was alive before the midwife came. And although we might feel morally certain that it was the ergot and the delay that killed the child, yet the midwife would get the benefit of the doubt, and probably make some counter charge against us. A few years ago a certain midwife in this city had a succession of cases of puerperal fever. The physicians who were called, in each case warned the midwife that she should not attend confinements for a while and should use disinfectants. But she continued her work until half a dozen cases resulted. To put a stop to it the health officer, himself a physician, had the midwife arrested for communicating a contagious disease, and it went into court. The result was that the doctor not only failed to make his case, but the midwife in turn sued him for ten thousand dollars damages for "malicious prosecution," and came very near winning her case, because he was a doctor and she was a midwife.

Ordinarily the best that the doctor can do, and what he should do, is to demonstrate to the family and friends that there is a better way than any that the midwife knows, and so educate the people above employing such incompetent persons.

If we could secure in this state a simple law requiring the registration of practitioners of medicine and midwifery, it would doubtless effect a great deal of good, and might ultimately result in more thorough legislation on this point.

When once it was required that there shall be a register kept, soon it would be inquired who is entitled to register.

INFLAMMATION OF THE MASTOID.

THE recent death of Roscoe Conkling as the sequel of a mastoid inflammation, notwithstanding the operation performed for its relief, and the publicity given the case in the daily press, has served to again call the attention of the profession to this subject. Probably no operation has so often received the hearty sanction of the profession only to fall again into disrepute. Riolanus, in 1649, was the first author to inquire into the propriety of perforating the mastoid process. Rollfink, in a dissertation on anatomy, published at Jena in 1656, advocated the operation. J. L. Petit, in 1750, was the first to actually perform the operation, which he did by means of a hammer and gouge. Jesser, in 1776, performed the operation upon a soldier, and established the opening of the mastoid as a legitimate surgical procedure. The operation was frequently performed after this date, until the Danish physician Berger caused the operation to be performed upon himself. The operation was performed by Dr. Kölpin, and on the twelfth day Dr. Berger died. The operation fell in such disrepute after this unfortunate death that it was seldom performed until Von Tröltzsch revived the operation again in 1861. Although the operation was performed by Weber in 1825—and in Frank's treatise on the ear several cases are alluded to—it was only with great trepidation that Von Tröltzsch ventured to open the mastoid with a probe. In 1863 Herman Schwartz opened the mastoid in a similar manner in the case of a child; and in 1864 Ludwig Mayer opened the mastoid through solid bone. From this date the operation became a frequent one, and much of its popularity is due to the advocacy of the American surgeons, Alfred Post, Buck, Roosa, Agnew, Noyes, Crosby and others.

Notwithstanding the general favor in which the operation is held by most aurists and surgeons at the present time, there are still some who treat this matter as though it were a questionable operation. Drs. Sexton and Strawbridge are the two physicians who have done much to unsettle the minds of the profession on this subject.

There is no one who would hesitate to make an incision down through the periosteum in case of a felon, and the condition we have in an inflammation of the mastoid is analogous. The dangers from the operation are little more, when carefully done, in one than in the other, while in one case the result is simply the loss of a finger if neglected, in the other possibly a life. While all cases may not result favorably, as in the unfortunate case of this eminent statesman, the physician who has at least done his duty and acted upon the well-recognized surgical principle that "whenever there is a focus of purulent discharge, it should be removed," has performed a life-saving operation that should be done under all circumstances, regardless of consequences.

DR. C. R. AGNEW.

In the death of Dr. Agnew the medical profession of New York has lost one of its most eminent members. We remember him as a painstaking teacher, a skillful operator, a courteous gentleman, and shall never forget the many favors he conferred upon us while in attendance upon his clinic. For a few years after graduating he was a general practitioner, but soon limited his practice to diseases of the eye and ear, and was one of the first to arrive at eminence in his specialty in New York. Although Dr. Agnew was not a voluminous contributor to the literature of ophthalmology and otology, he has written many articles of permanent value, some of his published clinical lectures being models of their kind. One we have particularly in mind was published in Vol. I of 'American Clinical Lectures,' edited by Seguin, on "Otitis, or Inflammation of the Ear in its Relation to What is Commonly Called 'Taking Cold.'"

Dr. Agnew's connection with the famous sanitary commission and the "pavilion hospital system" during the War of the Rebellion is well known: He was the organizer of two eye and one ear hospitals, both of which he saw placed on a successful basis. Although a specialist in practice, he

always had the interest of the whole profession at heart, both in public and private acts. He was an active member of many societies and never permitted his judgment to become narrowed by petty jealousies or professional quarrels.

Such cordiality as that with which Dr. Agnew and Dr. Webster worked together for years is not often observed, and a fitting tribute to that fact is noted in Dr. Agnew's will.

DR. J. A. ESCH.

Dr. J. A. Esch died very suddenly, at the age of sixty-six, of heart disease, at his residence on St. Clair street, April 4. He will long be remembered in his community as "the old German doctor." In his more active years he did a large practice, which he did not entirely relinquish up to the time of his death. One of his marked traits was a fondness for four-footed pets, birds and flowers, and his office was adjoined by quite an aviary. Dr. Esch took great interest in municipal politics, and when the office of police surgeon was created in Cleveland, it was occupied by him for two years. An admirable characteristic in Dr. Esch was that he was never known to speak evil, nor even disparagingly, of a brother practitioner. This is a virtue only too rare. Two of his three sons, J. P. and W. J. Esch, are physicians in active practice, one at Milan and the other at Huron, Ohio.

BACK NUMBERS OF THE GAZETTE.

We have received all of the back numbers asked for in the April number.* A few have been sent in with nothing to indicate where they came from, so that we have not been able to credit them properly.

Artificial Limb Manufacturing Company,

NO. 909 PENN AVE., NEAR NINTH ST., PITTSBURGH, PA.



Our Limb is
the best in the
world.

We—

CHALLENGE
—Comparison.

Mr. Wm. P. Chambers, Latrobe, Pa., with an Adjustable Lacing Socket Limb.
Record, 56 miles over country roads in one day.

AMPUTATION BELOW KNEE.

ARTIFICIAL LIMB Co., Pittsburgh, Pa.

January 17th, 1887.

Your limbs are the best that I have used, and in my judgment much the best in the market to-day. Last harvest I bound grain after a reaping machine and pitched hay all day, frequently with able-bodied men.

I lost my limb in the army, and tried other makes without satisfaction, therefore I speak from experience.

J. R. HASTINGS,

Sprucevale, Columbiana Co., Ohio.

ROBINSON'S *Lime Juice and Pepsin.*

PURE CONCENTRATED PEPSIN, COMBINED WITH PURE LIME JUICE.

A VALUABLE COMBINATION.

This elegant preparation is an excellent remedy for *Dyspepsia*, *Indigestion*, *Heartburn*, *Biliousness*, etc.

Impaired digestion is an almost universal consequence of a sedentary life, coupled with constant mental and nervous strain.

Reliable Pepsin is one of the best digestive agents known. Pure Lime Juice with its aperient and cholagogue characteristics, united with the Pepsin, furnishes a compatible and most efficient combination as a remedy for the disorders named above.

Robinson's Lime Juice and Pepsin is not only palatable but grateful to the taste.

DOSE.

The adult dose is from a dessertspoonful to a tablespoonful, to be taken immediately after eating. To children, one-half to one teaspoonful may be given, according to age.

PRICE, 6 OUNCE BOTTLES, 50 CTS.
16 \$1.00.

We invite attention to the following extracts, from a few of the letters we have received from Physicians, commending this preparation.

MESSRS. R. A. ROBINSON & CO. RIVERVIEW, KY., Dec. 30, 1886.

I have prescribed your *Lime Juice and Pepsin* in several cases of chronic indigestion, with very happy results. I can cheerfully recommend your preparations for purity, excellence and palatability. Respectfully,

Corn Creek P. O., Trimble County, Ky. (Signed) JOHN TOTTON, M. D.

MESSRS. R. A. ROBINSON & CO. MADISONVILLE, KY., Nov. 20, 1886.

Gentlemen: I am pleased with your "*Lime Juice and Pepsin*." I have used a great many kinds of Pepsin, but obtained but little benefit from them. I use your "*Lime Juice and Pepsin*" in my practice very extensively, and think that it is far superior to anything in the way of Pepsin. Yours truly, (Signed) W. S. ROSS, M. D.

MESSRS. R. A. ROBINSON & CO. DENVER, COL., July 20, 1887.

Gentlemen: I find your Lime Juice and Pepsin very efficacious, and use it continually for Dyspepsia. Very respectfully, (Signed) CHAS. DENISON, M. D.

189 RANDOLPH STREET, CHICAGO, September 26th, 1887.

R. A. ROBINSON & Co., Manufacturing Pharmacists.

Gentlemen: I have tried your Lime Juice and Pepsin in two very obstinate cases, and certainly am pleased with the results.

Yours truly, (Signed) LISTON H. MONTGOMERY.

Please be sure to specify Robinson's Lime Juice and Pepsin.

R. A. ROBINSON & Co.,
MANUFACTURING PHARMACISTS,
Established 1842. LOUISVILLE, KY.

MANUFACTURE ALSO

ROBINSON'S HYPOPHOSPHITES,
ROBINSON'S PHOSPHORIC ELIXIR,
ROBINSON'S WINE COCA,
ROBINSON'S ELIXIR PARALDEHYD,
ROBINSON'S COLORLESS HYDRASTIS.

FOR SALE BY DRUGGISTS.

NEW BOOKS.

'THE HYGIENE OF THE SKIN; OR THE ART OF PREVENTING SKIN DISEASES.'
By A. Rivogli, M. D. Central Medical Publishing Co., Cincinnati, O., 1888.
Price \$3.00.

A large book of about four hundred pages. In typographical appearance it is fully equal to works of similar size and character issued by the large eastern publishing houses. The time is rapidly coming when western authors will not be obliged to send their works to the east for publication.

There is no class of diseases about which there are so many popular superstitions among the people as those of the skin. And very much to the discredit of the profession, many members of it are not entirely free from them. This is probably due largely to the inefficient manner in which this subject has been taught in our medical schools. In fact, we have every reason to believe that the great mass of the profession have been graduated without even reading a book on skin diseases and possibly have never heard a lecture on this important subject. There are many excellent works on diseases of the skin, most of them expensive and dealing largely with those rare affections which only the specialist has occasion to treat. It seems to us that there is a place for a work such as this purports to be, dealing with the hygienic conditions of the skin and the means of preventing skin diseases. Such a work ought to be as accurate as possible in all statements made, and in accord with the latest predominant medical thought on the subjects treated, unless good reasons are adduced for being at variance. But we are obliged to confess that this work, upon careful inspection, fails to fulfill these requirements. Many of the statements are erroneous and do not properly represent the science of dermatology as it stands to-day, as the following quotations will serve to show. He says the macular syphiloderm "is never seen on the face," and speaking of the

early excision of chancres, he makes the following remarkable statements: "We believe that it is the duty of the physician to try this easy and simple operation, which will not only cure the patient but will preserve his family from the most disgusting disease that weakens and deteriorates our race." On another page he says that, "I conclude, therefore, that hereditary syphilis is the ordinary cause of lupus serpiginosus."

But it is not only on the subject of syphilis that he makes such broad and sweeping statements, for on the subject of heredity he says: "We shall now proceed to consider the hereditary origin of skin diseases, and afterwards show that hygiene may altogether do away with this tendency and prevent their development." But he fails to make any such demonstration conclusive to our minds at least. We wish he had done so.

The work is disfigured with such prescriptions as the following, which certainly do not deserve a place in a book making claim to be a scientific treatise. It savors too much of being addressed to the laity:

R	Hog's lard	. lbs. 25
	Mutton-suet	. lbs. 8
	Oil of bergamot	. 3 vj
	Essence of lemon	. 3 jv
	Oil of lavender	. 3 ss
	Oil of rosemary	. 3 j

Misce.

[The illustrations are mostly taken from Duhring's work on skin diseases, without credit.

Imperial College of Agriculture.

SAPPORO, JAPAN.

March 9th, 1887.

MESSRS. REED & CARNRICK.

GENTLEMEN:—Will you kindly send me, as soon as possible, by express via San Francisco, One 5 lb. Tin of "CARNRICK'S SOLUBLE FOOD." Forward to the care of Lohmann & Co., Yokohama, Japan. Perhaps a word of explanation for this order from far away Japan may not be without interest to you. My baby boy is now two months old and exceedingly strong and healthy, and is gaining in weight steadily at the rate of half a pound per week. Three weeks ago, however, he weighed half a pound less than at birth.

Forty-eight hours after birth, having received no nourishment, he was allowed a few drops of cow's milk and all the tepid water he desired. But the milk did not agree with him, producing the only symptoms of colic he has ever shown. On the third day, there still being no milk from the natural source, he was given two meals of "CARNRICK'S SOLUBLE FOOD," from a trial package in my possession.

This nourishment agreed with him perfectly, but was discontinued on arrival of the mother's milk.

When he was about four weeks old he showed signs of serious indigestion, passing material from the bowels closely resembling hard curds, and which analysis proved to be almost wholly unchanged casein. The most natural course was to attempt to remedy the difficulty by changing the diet of the mother, but, after two weeks of unsuccessful experiment, recourse was again had to the "CARNRICK'S FOOD," followed by immediate disappearance of all digestive trouble. However, with a supply of only four ounces of the remedy within 8,000 miles, and with the mother burdened with milk, some other means, as a permanent course, had to be adopted. The analysis of the mother's milk furnished the clue to the proper course.

The nutritive ratio (relation of albuminoid to carbo-hydrate constituents) was found to be too low; the amount of fat and milk sugar present was not sufficient to enable the infant to digest the excess of nitrogenous food furnished. By supplying this deficiency by feeding soluble carbo-hydrates, the proper nutritive ratio was restored; and the mother's milk, *thus supplemented*, is to-day accomplishing all that could be desired, and all that was gained by the use of the "CARNRICK'S FOOD" *alone*.

With this experience to judge from, I am convinced that the "CARNRICK'S FOOD" is as perfect and efficacious in practice as its composition is correct in theory. It appears to me to be compounded on thoroughly scientific principles, and in this respect differs from most of the other articles placed on the market for similar uses.

Assured of the superiority of your product, and feeling deeply grateful for the results of its use by my own child, I deem it only just to communicate these facts to you, with my sincere thanks for the benefits derived from "CARNRICK'S SOLUBLE FOOD."

Believe me, very truly yours.

H. E. STOCKBRIDGE, Ph. D.,

Prof. of Chemistry and Consulting Chemist to the Imperial Japanese Government.

Samples of our preparations will be sent to any physician who will pay express charges.

REED & CARNRICK.

NEW REMEDIES.

PIL. TERPIN HYDRAT. "W. H. S. & CO." 2 Grains each.

A new and potent remedy in the treatment of coughs, catarrh, bronchitis, and kindred diseases.

Terpin Hydrate is in the form of colorless monoclinic crystals, melting at 100° C. and has the composition $\text{C}_{10}\text{H}_{20}\text{O}_2 - \text{OH}$.

It was first prescribed in France by Lepine, who recommended it as an expectorant, Guelpa took 4 grammes in 12 hours, and Jeannel prescribed 2 grammes per day, for several weeks in succession, without the least sign of intolerance.

Jeannel and See found it useful in Bronchial affections, and Vigier in the same disease recommends it to be taken in pills to the extent of one or two grammes per day.

Dr. Halstead Boyland (*vide "The Medical Record,"* Sept. 24th, 1887,) speaks very enthusiastically of Terpin Hydrate, and after quoting several cases in which it has been exhibited with marked success, thus concludes: "It has proved eminently satisfactory in my hands in every case in which I have used it, and I now prescribe it freely in all Coughs, Colds, and Catarrhal affections, as well as in Bronchial troubles generally, wherever elimination is indicated, and should advise its administration in Asthmatic Dyspnoea in doses of 2 grains every 15 minutes until 10 grains have been taken or relief had been obtained. It has already proven itself of great utility in the treatment of diseases of the respiratory tract, and must be conceded to be a valuable addition to the Pharmacopœia."

We have submitted our Pills of Terpin Hydrate to physicians of eminence, and from all who have had opportunities of trying them the remedy has received their unqualified approval.

In a case of chronic bronchial catarrh, the patient being a very stout lady, the relief was immediate, the cough easier, sleep quite normal, and expectoration free.

PIL. HYDRARGYRUM TANNICUM OXYDULATUM. "W. H. S. & CO."

(MERCURY TANNATE.) 1 GRAIN EACH.

Mercury Tannate was first prepared by Dr. Sigmund Lustgarten in the Pathologic-Chemical Institute of Prof. E. Ludwig, in Vienna.

It is a greyish-green powder, containing at least 40 per cent. of Mercury, and is absorbed by the system with great rapidity due to the fine separation of the Mercury; at the same time it is free from the disagreeable symptoms accompanying the use of other mercurial preparations.

Dr. Lustgarten submitted his experience with Mercury Tannate to the Imperial and Royal Society of Physicians in Vienna, January 4th, 1887, showing that it possessed mild antisypilitic properties, seldom producing salivation, stomatitis, or diarrhoea, which so often follow the administration of the Chloride, Bi-chloride, Protiodide, and Biniodide forms of Mercury.

Doctors Shadeck, Leblond, Dornig, Person, Borowski, and Lesser, and Professors Lang and Finger, all write approvingly of Tannate of Mercury.

We have placed the Hydrargyrum Tannicum Oxydulatum in the hands of several eminent physicians, connected with hospitals of New York, for trial, so that a verification might be obtained of the foregoing testimony. From reports already received it seems well worthy of a more extended trial. We now offer it to the medical profession in the form of our soluble pills containing one grain each.

PIL. SALOL. "W. H. S. & CO." 2½ and 5 Grains each.

A new remedy for rheumatism and rheumatic affections, possessing all the advantages of Salicylic Acid and Salicylate of Soda, while not causing any of their objectionable effects.

This valuable remedy was introduced by us to the medical profession several months since, to whom we offered it in pill form in strengths of 2½ and 5 grains to each pill.

"Salol" or "Salicylate of Phenol" was first introduced by Professor Von Nencki of Berne, and first brought to the attention of the medical profession in a communication by Dr. Sahli to the Medico-Pharmaceutical District Society of Berne, at its meeting held in that city on April 6, 1886.

Salol is composed of 40 per cent. of Phenol (Carbolic Acid) and 60 per cent. Salicylic Acid; a very faint odor of Carbolic Acid is characteristic of pure Salol.

We are now revising our TREATISE on Salol, in which we intend to incorporate the latest experience acquired in the treatment of the several diseases for which Salol is indicated.

This TREATISE will be mailed on application.

W. H. SCHIEFFELIN & Co., 170 & 172 William St., N.Y.

IN PRESCRIBING BE PARTICULAR TO SPECIFY W. H. S. & CO.'S.

Pamphlet Notices.

Anyone desiring a copy of any pamphlet noticed under this head, will doubtless secure it by addressing the author—not forgetting to enclose a postage stamp and a mention of the GAZETTE.

'What Are the Laws of Ohio Regulating the Practice of Medicine and Surgery, and What is Needed to Protect the People from Impostors?' W. W. Jones, M. D., Toledo, Ohio.

'Hay Fever.' By S. S. Bishop, M. D., Chicago, Illinois.

'Practical Thoughts for Physicians.' By G. W. H. Kemper, M. D., Muncie, Indiana.

'Gleditschin, Spurious and Genuine.' By Edward Jackson, M.D., Philadelphia, Pa.

'On Certain Mooted Points in Gynæcology.' By Thomas Addis Emmett, M. D., New York City, New York.

'A Report on the Sanitary Inspection of Passenger Coaches.' By R. Harvey Reed, Mansfield, Ohio.

Dr. Jones makes a strong plea for a medical registration law in Ohio. It seems to us that the profession ought soon to learn from past experience that it is impossible to secure such medical legislation in this state as would be desirable, and would bend all their energies to securing a simple registration law, which would be the first step toward securing something better.

This first prize essay of the United States Hay Fever association for 1887, deals almost exclusively with the cause and treatment of this peculiar affection. Although nothing new is presented in this brief essay, hints for treatment may here be found not otherwise accessible to many practitioners.

Dr. Kemper's address before the Indiana State Medical society is much more readable than the average address of this kind, and although many of us may not have the same implicit faith in drugs, and may differ from him in our religious beliefs, yet we cannot but credit him with sincerity.

Dr. Jackson in this paper recounts some of the experiments made by himself and others, which led to the detection of the stenocarpine fraud.

There is more good common sense condensed in this little article of Dr. Emmett's than anything we have read in a long time. Every young, aspiring gynæcologist should read and digest this article well; and everyone who has occasion to prescribe for the ills of women may find food for thought also. He says that, "I avoid, if possible, the introduction of any instrument or remedy within the uterus. I have not owned a sound for years, and my probe has been broken for fully eighteen months—both instruments having become useless to me since I first acquired any knowledge of bimanual palpation."

Dr. Reed has expended much time and labor on the preparation of this valuable report, and we hope it may lead to an improvement in the method of heating, ventilating and lighting of passenger coaches. Probably no one is in a position to discuss this subject more intelligently than Dr. Reed.

BOUND COPIES OF THE GAZETTE.

We are now prepared to furnish bound copies of the GAZETTE, Volume I. and II., in uniform binding. Leather backs and corners, black letters, from \$1.50 per volume. Same in gilt letters, \$1.65 per volume. In raised backs and gilt letters—an elegant binding—for \$1.75; and in morocco binding for \$2.00. We can furnish back numbers to complete file, for fifteen cents per copy. Binding of all kinds at lowest rates.

TERRACE BANK

HOSPITAL for WOMEN

(DR. SUTTON'S PRIVATE SANITORIUM.)

This institution, remodeled and enlarged, is now open for reception of patients.

It is located on a fashionable avenue in Allegheny City, directly opposite to and in full view of the city of Pittsburg, Pa. The rooms are large and well ventilated, by means of open grates, with natural gas for fuel. None excepting trained nurses are employed. They are under the direct supervision of a competent resident physician. The culinary department is excellent, and the dining-room is managed on the restaurant plan of small tables and excellent servants. The rooms vary in price from \$15 to \$35 per week, including the services of nurses and servants, light and heat. In all cases the professional fees are \$15 per week.

Surgical operations are not included in the above. Drugs and liquors are furnished at cost, and all laundry work of patients is sent, at their own expense, to the laundries of the city. Dr. Sutton spends the half of every day, viz., from 1 P. M. to 6 P. M., at the institution. For further information address the matron,

MISS KENNEDY,

170 Ridge Avenue, Allegheny, Pa.

The most Compact Thirty-Minim Syringe Made

Case of metal, handsomely embossed and nickel-plated, as shown in cut, actual size.

The barrel is of metal, formed by a process securing uniformity of caliber, without soldered joint or seam. It is plated inside and out with nickel. The piston is packed in the double parachute form, with leather prepared for the purpose. It retains its elasticity, operates smoothly, resists all tendency of fluid to pass above as of air below it. An engraved scale upon the piston-rod indicates minims, thirty being its capacity. It has two needles of refined steel, carefully tempered.

Price, \$3.33, less 25 per cent. to physicians, or net \$2.50. Postage, 3 cents.

Send for Circular of our other Hypodermic Syringes.

HYPODERMIC SYRINGES

OF ALL KINDS

PROMPTLY REPAIRED.

Our Hypodermic Syringes have for years had the highest reputation.

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UPJOHN'S IDEAL-COATED PILLS

ELEGANT IN FINISH.

A RATIONAL IDEA.

We manufacture a line of PILLS AND GRANULES, most of which are practically ENCAPSULED POWDERS. The more popular formulæ, usually prescribed in pill form by the physician, being made into an elegant pill WITHOUT EXCIPIENT, and with only coating sufficient to cover the taste.

QUININE PILLS.

We especially wish to recommend our Quinine Pills as being in the ideal condition for administration. Try them. They will give you better results than Quinine in capsules, and will not cost more.

QUININE PILLS IN BULK.

For several years the various manufacturers have been selling Quinine and Cinchonidia Pills in bulk to a select few of the retail trade, at a greatly reduced price. In order that every consumer may have the benefit of this reduction, we bottle these salts in bottles containing five ounces each, at a price which closely approximates the combined cost of the salt and capsules in which to put it, thus insuring greater accuracy and saving much time.

5 Ounces Quinine in $\frac{1}{2}$ Grain Pills	(4375 Pills)	\$4.50
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5 Ounces Chinchondia Sulph., any size Pill,		1.50

Prices subject to fluctuation in price of salt.

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The accuracy of dose is absolute, and the fact that they are sufficiently soluble for hypodermic use insures their free and rapid solution when given by the stomach.

Special Offer to Physicians!

To facilitate the introduction of our goods, we offer AN ELEGANT POCKET CASE, containing twelve (12) bottles filled with Granules (125 to 150 in each bottle), for \$2.25, but little more than the value of the case and twenty-five per cent. less than list price of the granules. Physician's name on each case in gilt. Write for granule list to check from. Case sent by mail, postage prepaid. Cash must accompany order.

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NOTES AND COMMENTS.

INDEX MEDICUS.

We are sorry to learn that this remarkable journal is not yet self supporting. In an editorial published in the January number of the Therapeutic Gazette, a memorandum showing the number of paying subscribers in each state and foreign country is published. The total number in the United States is 240 and foreign 123, making a total of 363 paying subscribers.

"In the home list it is curious to remark that New York (78) has twice as many subscribers as Pennsylvania (39), and that in Massachusetts (34), Maryland (13) and the District of Columbia (14) a reading physician does not seem to be a very scarce animal. In the great state of Illinois, with the fermenting mass of commercial activity like Chicago, but eight doctors have had pride enough in their country's publication, interest enough in medical science, or a love of reading sufficient to warrant their spending ten dollars a year in sustaining the most illustrious medical publication in the United States, and nurturing their own souls and bodies by medical culture. Worse than this, a rich state like Kentucky, with cities as large as Louisville, does not even seem to require one copy of the publication, and our own great state is satisfied with six copies of this valuable journal.

The receipts from the 'Index Medicus' to the publisher are not nearly enough to cover the cost of so extensive a publication. Mr. Davis deserves the very warmest thanks of the profession, but how long he will continue to carry this burden we do not know. It is most extraordinary that he does not in this matter receive better backing. The thanks of the profession are good, but the thanks which do not express themselves in bank-notes are only an exemplification of the old proverb, 'Soft words butter no parsnips.'"

A correspondent asks the Medical and Surgical Reporter for the proper pronunciation of itis in gastritis, hepatitis, etc., and the editor replies that either eyetis or etis is correct, depending upon the system of Latin pronunciation adopted

by the speaker. As 999 medical men out of every 1,000 pronounce the technical terms of their profession according to English methods, they should, in order to be consistent, say *eyetis*. If you adopt the Roman or Continental methods of pronunciation, you may call *bronchitis*, *bron-keetis*, but you should, in that case, also pronounce *vaginitis*, *wah-ghe-neetis*, *femur*, *famoor*, and *caecitis*, *kykeetis*, etc. A few years ago, a teacher of anatomy in one of our eastern colleges attempted to apply his so-called Roman method of pronunciation to anatomical words, but only succeeded in making himself extremely ridiculous. We should look upon our technical words, borrowed or manufactured from the classical languages, as English words, and give them an English sound, since we know very little about the ancient pronunciation of Latin and Greek. Every nation in Europe, except the English, pronounces Latin according to the sounds of the letters in its own language. The French would call Cicero, *seesaro*; the Spanish, *theeharo*; the Italians, *chicharo*; the Germans, *tsitsaro*. Why then should the English of all the civilized nations using Latin, give words borrowed from this language a foreign sound, or attempt to restore a pronunciation of which they know nothing? We, therefore, advise our readers to pronounce Latin according to English methods, and give the *i* of *itis* its long English sound, thus maintaining a consistent system of orthoepey.

Dr. E. E. Beeman, whose Pepsin advertisement appears on the last cover page of this number, wishes us to state once more that he has no connection, nor never has had, with a patent medicine advertised extensively as *Beeman's Worm Destroyer*. Dr. Beeman is a graduate of medicine, was a practitioner in good and regular standing for many years, and has a high sense of professional etiquette, and does not wish to have his name connected with any patent medicine or other unprofessional undertaking.

Purity is beauty.—All goods sold by the Great Atlantic & Pacific Tea Company are warranted pure.

One of our subscribers writes that the article on the abuse of quinine alone is worth to him many times the subscription-price. He would like to hear more from Dr. W. H. Beggs.

A state sanitary convention will be held at Lewisburg, Union county, Pa., Thursday and Friday, May 17 and 18, 1888. An excellent programme has been prepared, and a profitable meeting may be expected.

— THE —
Cleveland Medical Gazette.

VOL. III.

JUNE, 1888.

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ORIGINAL ARTICLES.

CATARRHAL PNEUMONIA.*

BY D. N. KINSMAN, M. D., COLUMBUS, OHIO.

• Professor of Theory and Practice in the Columbus Medical College.

I PLACE this term at the head of this paper because I have been requested to open the discussion. There are many synonyms in our literature for this term. Among them is broncho-pneumonia, first used by Seifert in 1838, which seems to me to be preferred to all others, for it alone gives any special suggestion of the underlying morbid anatomy of the disease.

This is a special form of lung disease, and differs from ordinary acute lobar or croupous pneumonia in many aspects.

It is largely a disease of infancy, and has been called suffocative catarrh of infants, pneumonia of infants, etc. It is a secondary affection in all cases probably, and follows bronchitis, whatever may have been the cause of the primary affection. It is a local disease with sharp limitations from

* Remarks in the discussion of catarrhal pneumonia before the Central Ohio Medical Society.

beginning to end, while acute lobar pneumonia, I believe to be a constitutional affection with local pathological deposits. Broncho-pneumonia has no well-defined cyclical course, which is very marked in acute lobar pneumonia.

Broncho-pneumonia leads to the formation of local deposits, which end in the destruction of the lungs, *i.e.*, phthisis. In one-half of all cases acute lobar pneumonia is confined to the right lung, while broncho-pneumonia commonly assails both lungs.

Before entering into the study of the pathological anatomy and pathogeny of broncho-pneumonia, for the sake of clearness we must refer to the normal anatomy of the lungs.

ANATOMY OF THE PULMONARY LOBULE.

The pulmonary lobules present very accurately the structure of the entire lung. By massing them the lung results. Each lobule is separated from its neighbor by a cushion of cellular tissue, which is thicker in the young than the old. In the fœtus and newly-born, each lobule is easily separated from the rest; in the old man, however, the interlobular cellular tissue is drawn out to a mere film, and in many cases is very hard to demonstrate. Polyhedral in shape, the lobule is attached to the rest of the organ by a pedicle. The skeleton of this pedicle is formed by a quite small bronchus; it may be only a millimeter in diameter. This is the sublobular bronchus to which are fixed, by a dense cellular tissue, a branch of the pulmonary artery, a branch of the pulmonary vein, the lymphatics and nerves and the ultimate ramifications of the bronchial artery.

The sublobular bronchus gives off a branch which penetrates the lobule. It enters at the top and passes through the lobule after the fashion of the central nerve of a leaf. On its passage from the summit to the base of the lobule, the lobular branch gives off intra-lobular branches, variable in number from five to nine; these strike out in alternate order from the bronchus, and in their course give off new branches. All alike terminate as the lobular branches by dichotomous division, as bronchial acini—Lalesque.

Charcot says after the bronchioles have reached their minimum size they expand into what is known as the infundibulum, into which the air cells enter as the cells of a prison communicate with a corridor.

Both the bronchi and the air cells are lined with a cuboidal epithelium in early life. In adults, this epithelium flattens out and resembles pavement epithelium.

BLOOD SUPPLY OF LUNGS.

To the lungs belong two circulations: the functional, concerned in hæmatisis, depending upon the pulmonary arteries and veins; the nutritive, which depends upon the bronchial arteries and, to a small degree, upon the pulmonary.

Acute lobar pneumonia is connected with special disorders of the pulmonary capillaries, while broncho-pneumonia has a direct relation to the distribution to the bronchial artery. According to the researches of Cohnheim, Litten, Le Fort, Frank and Lalesque, these two arteries run from the root of the lung to the infundibulum of the bronchus without anastomoses. The pulmonary arteries follow the bronchi, and divide as they divide, branch for branch, until finally they plunge into the alveoli and form the net-work of arterial capillaries. In like manner the bronchial artery follows the ramification of the bronchi, being distributed to their coats until the intra-lobular bronchus enters the acinus and there, after having supplied, in addition to the bronchial wall, the first divisions of the alveoli which surround the infundibulum, the further course is lost. And this explains why inflammation of the smaller bronchi without alveolar inflammation, *i.e.*, broncho-pneumonia, is impossible. The blood of the bronchial arteries below the fifth and sixth bronchial divisions has, under the influence of the oxygen of the air in the alveoli, been kept oxygenated so that it can enter the pulmonary capillary net-work and return to the left auricle. This constitutes a third circulation in addition to the "systemic" and "pulmonic," and may be called the arterial blood circle, because the blood never loses its oxygen and becomes venous.

The further description of the vascular supply of the lungs is unnecessary at this time.

PATHOLOGICAL ANATOMY.

Catarrhal pneumonia or broncho-pneumonia primarily involves the territory supplied by the bronchial artery. This territory includes the wall of the bronchus and the first row of alveoli in the acini. The further extension of the process is in the territory of the pulmonary artery, and depends upon an extension of the process into the deeper portion of the air cells by contiguity of structure.

In order to clearly understand the pathological anatomy of this disease, we must analyze the process and study each of its elements: 1. The bronchial tubes are composed from within outward, of an epithelial layer—a basement membrane—an inner fibrous coat in which the blood-vessels course beneath the basement membrane, the muscular coat and an outer fibrous coat.

The first step in the inflammatory process, known as bronchitis, is a congestion of the blood-vessels, the result of cold, irritations from dust or gases without, and poisons circulating within the organism.

As a result of the congestion there is swelling or œdema of the basement membrane and a separating of the ciliated epithelium of the bronchial tube, and great multiplication of the deeper epithelial cells, which separate and fall into the lumen of the tube, and there become mixed with the increased mucous secretion. Nor is this all. The inner fibrous coat has been infiltrated and the lymphatics stuffed with cells of various sizes, either migrated from the vessels or from multiplication of connective tissue corpuscles.

In like manner the portion of the lobule supplied by the bronchial artery suffers. There is multiplication of the epithelial cells lining the alveoli. They become detached and accumulate in the air cells, while at the same time the interlobular and intra-lobular spaces become infiltrated with leucocytes, in the same manner as we have described for the terminal bronchus. By multiplication and detachment of the

epithelia of the alveoli, as well as insufflation of the products from the inflamed bronchus, the lobule becomes distended.

A cross section of a lobule shows the following condition of affairs: In the centre is the bronchus containing cells and mucus. Around the bronchus is developed the peri-bronchial nodule of inflammatory products; in a zone surrounding this are the alveoli filled with fibrine and cells, and in a zone still beyond is the lobular tissue simply congested. In the capillary vessels of the alveolar walls there is no stasis, as in croupous pneumonia. These nodules are disseminated or aggregated. From plugging of the bronchi and the escape of the air from the vesicles, collapse of the lung results. In these collapsed portions nodules of varying size and frequency are felt. There seems to be no necessary connection between collapse and the development of the nodules of broncho-pneumonia. By squeezing these nodules the contents, a yellowish, puriform mass, may be pressed out.

When resolution takes place, the cellular matter in the alveoli undergoes a fatty degeneration, breaks down into a kind of "pathological milk," and is absorbed or expectorated. The epithelium reforms and a cure becomes established.

Under other circumstances, instead of resolution, there is greater multiplication of cells in the peri-bronchial nodule and in the surrounding alveoli, and the lobule projects from the surface of the lung as a yellowish nodule. The fluid portion is absorbed and the exudate caseates. This process, according to Hamilton, depends upon interstitial changes taking place in the lobular contents, dependent upon the slow arrest of the blood supply. Charcot, Balzer and others maintain that caseation does not occur in simple broncho-pneumonia, but in tuberculous broncho-pneumonias only. They say the process of caseation begins in the centre of the peri-bronchial nodule. And when it occurs, the nodule is not simply an aggregation of epithelial cells, leucocytes and fibrine, but is a neoplasm whose elements undergo retrograde metamorphoses which end in caseation. However we may explain this process, the fact remains that when it occurs this product is never discharged except by ulceration and destruction of the

structure in which the caseous mass lies. The ulcerative process may be confined to a single acinus, or large portions of the lung may be involved. Thus tuberculosis is developed upon the basis of catarrhal-pneumonia. As to the question of how the tuberculous neoplasm begins, we who are believers in its bacillary origin have no difficulty. The bacillus is introduced from without, and on the inflamed mucous membranes of the bronchial tubes and air cells, it finds a suitable culture soil. It there produces its peculiar kind of irritation, and this results in a non-vascular neoplasm with a malignant tendency to caseation. Each softened tubercle is a source of new infection, and under successive shocks the organism at last yields and death results.

In subacute forms of broncho-pneumonia there is a distension of the terminal bronchus with cells, the mucous membrane ulcerates, the muscular wall yields, the alveoli are pressed aside and there results the so-called abscess. Balzer says that in all such cases, when he has destroyed the leucocytes with liquor potassa, he has found the elastic skeleton of the alveoli remaining, which proves these accumulations to be retention cysts and not abscesses. It is needless to say that in time cavities may result as a final process when these beams and the surrounding tissue have become necrotic.

It is evident that the results of broncho-pneumonia will be varied as to the way in which the bronchus is involved. If the inflammation is superficial there will be swelling of the mucous membrane, great epithelial reproduction with excessive mucous production. This is suffocative catarrh of children.

If, however, the deeper structures of the bronchus are involved, then there will be great enlargement of the lymphatic trunks and interlobular beams of the alveoli, because the inflammatory products can no longer escape towards the lumen of the bronchus, being confined below the basement membrane, and they must find their way out by the lymphatic trunks beneath the pleura. And hence in chronic cases we have manifestations of pleurisy and condensation of the lung.

Tuberculosis sometimes ends the morbid process as already alluded to.

SYMPTOMS.

This disease is peculiar to children and the aged. Juer-gensen says the *post-mortem* table reveals many cases of broncho-pneumonia till then unsuspected.

Broncho-pneumonia follows or complicates measles, diphtheria, scarlatina, typhoid fever, variola, influenza, cardiac diseases, those of the kidneys and brain, and extensive burns. Sometimes its invasion is sudden and well marked; at others, insidious and uncertain. There is dyspnœa with from thirty to eighty respirations per minute, the patient sits up in bed, the face becomes livid, all the muscles of respiration are in excessive action, the shoulders rise at each inspiration, and there is guttering of the abdominal walls from the increased action of the diaphragm. The respiration becomes strongly expiratory and accompanied with a groan. There is no pain in the chest; there is much cough but little expectoration. The skin is cyanotic and the senses are obnubilated.

PHYSICAL SIGNS.

By percussion little or nothing can be learned by reason of limited extent of lesions.

The signs elicited by auscultation are those of bronchitis, with puffs of crepitant rales when the patient inspires preparatory to cough. The sub-crepitant rales are present during the whole course of the disease. A peculiarity of these rales is their extreme mobility, existing here now, to be changed the next minute by cough or varying respiratory capability.

The fever rises to one hundred or one hundred and four degrees Fahr. The pulse beats sometimes one hundred and eighty per minute.

The duration is subject to great variations. Being a local disease, it has no regular course.

TOBACCO AMBYLOPIA.*

BY A. R. BAKER, M. D. CLEVELAND, O.

ANYONE who has examined the literature of this subject cannot fail to be impressed with the diversity of opinions expressed, as well as with the lack of uniformity of symptoms described as characteristic of this disease. Some authors claim that the disease is accompanied by a haziness of the optic disk; others by an atrophy without a previous neuritis; and yet others claim that there are no changes to be seen by an ophthalmoscopic examination. While many observers have laid much stress upon the combined influence of tobacco and alcohol in causing this form of amblyopia, even claiming that it never occurred from the use of tobacco alone, so acute and accurate an observer as Mr. Jonathan Hutchison has expressed himself as believing "that alcohol had some influence in counteracting the deleterious effects of tobacco." Mr. Gunn thinks that total abstainers and drunkards are both more liable to suffer than moderate drinkers. Although Professor Hirschberg has said that tobacco amblyopia never resulted in total blindness, Mr. Streatfield says that in some cases white atrophy occurs, and unless the habit of smoking be given up by the patient, he soon becomes blind.

It has been said that women never suffer from this form of toxic amblyopia, although Dr. Chisholm, Mr. Sloan and Mr. Hartridge each report one such case, and Mr. Hilton Griffith reports seven cases as occurring in the Manchester Royal infirmary, and Mr. Berry has met three cases, all smokers.

Although most observers believe that tobacco amblyopia results more frequently from smoking than chewing, Dr. Ayers asserts that the opposite is true.

Galazowski says that it is of frequent occurrence among persons working in tobacco manufacturing establishments; Dr. Ely, who spent much time in examining cigar-makers, says that it rarely if ever occurs among them. While there has been considerable unanimity in claiming that it occurs

* Read before the Ophthalmological section of the American Medical Association at Cincinnati, Ohio.

more frequently in Europe than in this country, I think this is a question open for further investigation.

Dr. Carter, who has passed much of his life in Turkey, where tobacco is used greatly in excess of that used in western countries, says that he never met a case of tobacco amblyopia in Asia.

As to treatment, there is no less diversity of opinion, some claiming that it is absolutely necessary to stop the use of tobacco entirely, while others only limit the quantity used and advise a milder tobacco. Many emphasize the necessity of prescribing strychnia; others believe iodide of potash to be the *sine qua non*, and still others have found that their cases do equally well with no medication.

Where we have such a variety of opinions expressed, it is not much wonder that we have those who even doubt the existence of this peculiar form of amblyopia. Among those who are of this opinion, according to Minor, we may mention Walton, Carter, Albutt, Roosa, Pomeroy and Minor. Others who have given only their *quasi* endorsements are Wells, Wolf, Stelwag, Mittendorf, Noyes, Williams, Meyer and Wecker.

Among those who have given their unqualified belief to the theory that there is an essential toxic amblyopia due to the excessive use of tobacco alone, and not to the combined effects of alcohol, depressing emotions, opiates, etc., we may mention Hutchison, Hirschberg, Juler, Netelship, Gowers, Bader, Powers, Green, Swanzey, Hartridge, Searles, Ayers, Coleman, McNamarana and Chisholm.

Amid such a variety of opinions I can scarcely hope to bring order out of chaos in this brief paper. Yet I imagine that the diversity of opinions as expressed is more apparent than real. Probably there is no one who has carefully examined the evidence already adduced, who doubts the existence of a toxic amblyopia, characterized by a rapid failure of sight, a central scotoma for red and green and no marked changes to be discovered with the ophthalmoscope.

It has occurred to me that the fruitless search after some ophthalmoscopic evidence of the existence of this disease has

led many observers into error. When almost any series of published cases is examined critically, it will be noticed that many of them are so palpably due to other causes that it makes them almost useless for statistical purposes. We often find cases of neuritis, atrophy, retinitis, chondritis and even embolism of the central artery, all classed together as due to the excessive use of tobacco; cases presenting all the characteristics of other diseases; and, with the exception of that of failure of sight, none of those belonging to tobacco amblyopia.

It has been assumed by most observers that there is a retro-bulbar neuritis, and although no *post-mortem* evidence has been adduced in support of this theory, the almost universal treatment has been either strychnia or iodide of potash, as the peculiar bias of the physician has led him to believe the neuritis to be either in the stage of exudation or atrophy. Yet if we exclude all the cases in which there is a contracted field of vision—all the cases in which there is an atrophy, hyperæmia, swelling or blurring of the disk—we still have remaining a large percentage of cases with the history of using large quantities of tobacco, a rapid failure of sight with a large central scotoma for red and green and often for other colors as well, whose sight will rapidly improve when the use of tobacco is discontinued, without medication, although in practice it is well to give the patient a placebo. I remember a typical case of this kind occurring in the Royal London Ophthalmic Hospital (Moorfield's) some years since, which caused much merriment among the assistants and students. At that time there was considerable diversity of opinion among the attending surgeons with regard to tobacco amblyopia, some believing that tobacco was the sole cause of the failure of sight, others believing alcohol, opium, shock or some depressing emotion to be the prime factor in causing the amblyopia. Some were quite sure the amblyopia was always accompanied by a hyperæmic condition of the disk, if not with an active neuritis. Others as firmly believed that all typical cases presented an atrophy of the optic disk without a previous neuritis. This patient presenting a

typical scotoma for red and green would be presented to one of the gentlemen, a firm believer in the atrophy theory, and sure enough, the case would present to his eye all the appearance of a commencing atrophy. He would then be presented to one of the gentlemen committed to the neuritis theory, to whom he would present all the appearance of a commencing neuritis. The fact of the matter is, the patient's disks were normal, but the theories of the gentlemen led them into seeing things that did not exist.

One of the arguments used against the theory of the amblyopia being due to the use of tobacco alone is that relapses occur so seldom. This may, however, be more apparent than real, as patients suffering from a second attack would naturally stop the use of the tobacco without again consulting the physician.

The history of the following case, which I have had under observation for almost five years, will serve to show the course of the affection when the use of tobacco is not entirely given up. It also shows that if it ever leads to atrophy it does not always do so.

CASE I.

Mr. H., American, wealthy, retired merchant, age fifty-nine, uses alcoholic stimulants moderately (?); smokes from forty to fifty strong cigars daily and smokes a pipe between times. First noticed failure of sight three years ago. Had observed some improvement in the vision when he did not smoke so much. He himself attributed his loss of sight to excessive use of tobacco. Vision about $\frac{3}{200}$ in either eye; counts fingers with difficulty at three or four feet; sees better at temporal side of field than any other; almost entirely blind to red and green; no changes to be seen in retina or optic disk with ophthalmoscope. Mr. H. would not consent to give up smoking entirely, but agreed to limit himself to six cigars daily. At the end of one month his vision improved to L. E. $\frac{20}{100}$, R. $\frac{20}{70}$, and could distinguish red and green at the periphery of the field of vision. At the end of five months he could read the newspaper easily and considered himself well, although

he could see only L. E. $\frac{20}{70}$ and R. E. $\frac{20}{50}$ and there still remained a large central scotoma for red and green. About this time he commenced smoking more frequently. Said he would go blind rather than restrict himself to short allowance of tobacco. At the end of one year his vision had failed again to about $\frac{20}{100}$, and he was now unable to read the newspapers. He again returned to his six cigars daily and his eyes soon improved to about $\frac{20}{50}$. I have not time to detail the constant struggle Mr. H. has made between his appetite and his desire to see. Sometimes he is almost blind. He then uses less tobacco and again is able to see better. During all this time I have been able to detect no changes in the retina or optic disk.

The interesting features of this case are: 1. Long duration—nearly eight years. 2. The correct diagnosis of the case by the patient. 3. The strong hold which the tobacco habit has upon a man of wealth and intelligence, leading him to sacrifice his vision to the habit. 4. That during all this time there has been no pathological changes discoverable in the optic disk.

CASE II.

Mr. S., aged 61, has used morphine regularly for fifteen years; now uses one-eighth ounce bottle per week. General health pretty good; very talkative; statements can't be relied upon; was at one time wealthy, but failed in business; has always smoked pipe to excess, and chews occasionally; never uses alcoholic stimulants—teetotaler; no changes to be seen in optic disk with the ophthalmoscope; red and green can be seen only at periphery of the field, better to the outer and upper side. Vision, L. E. $\frac{20}{200}$, V. R. E. $\frac{10}{200}$. Sight has been failing for about a year, but not markedly so that friends noticed it until within the past two months. I prescribed strychnia, combined with bitter tonics, and prohibited smoking, but allowed him to continue chewing. Instead of improving at the end of one month, I found his vision reduced to L. E. $\frac{5}{200}$, R. E. $\frac{5}{200}$. I then directed him to stop chewing also, and increased the amount of strychnia. But at the end of another month

his vision had failed to barely being able to count fingers at ten inches, and it became necessary for his friends to lead him to my office, which was only a short distance from his residence. I must confess that my faith in my diagnosis of tobacco amblyopia was somewhat shaken, but upon insisting that his friends watch him to see whether he did not smoke at times, they discovered that he was smoking nearly all night and chewed almost constantly during the day, and used all the ingenuity of an insane person to prevent his friends from knowing it. They then watched him closely so that for some weeks he used no tobacco. His vision rapidly improved, and at the end of a month was able to see $\frac{20}{70}$ with either eye easily. But he compensated for the loss of his tobacco by increasing the amount of morphine used, so that it became necessary to send him to an asylum for treatment for the opium habit. This ended my connection with the case, but I am told his vision continued to improve after going to the asylum.

This case is interesting in that amblyopia existed in a patient who never used alcohol, but was a slave to the use of morphine, and improved rapidly when the tobacco was stopped, notwithstanding the amount of morphine consumed was greatly increased, proving pretty conclusively that the amblyopia was due to the tobacco and not the morphine habit. The almost total loss of useful vision, so that it was necessary to lead him about, was somewhat unusual in my experience with these cases. One of the distinguishing characteristics of these cases is that even when the vision is so much impaired for reading, and by all ordinary tests we would be inclined to think they are quite helpless, owing to the peripheral vision remaining comparatively good, they are enabled to walk about and even perform certain kinds of labor quite skillfully, and do not show the same uncertainty in their movements that cases of atrophy, with a contracted field of vision, exhibit.

CASE III.

Mr. S., aged 17; American, of German parents, both of

whom smoke; fresco-painter; general health good; never uses stimulants of any kind. Has smoked cigarettes ever since he can remember. No pathological changes to be seen in the fundus of either eye; large scotoma for red and green; much larger in right than left, V. R. E. $\frac{20}{100}$, V. L. E. $\frac{20}{30}$. I suspected lead poisoning, but soon discovered there was no lead in the pigments he used. I kept the case under observation for some weeks, with a steady loss of vision, until it was reduced to $\frac{10}{200}$ in R. E. and $\frac{20}{100}$ in L. E. I gave iodide of potash in heroic doses without any perceptible benefit. I tried strychnia and electricity. I frankly confessed that I was unable to make a diagnosis. My patient suggested the propriety of seeking counsel elsewhere, to which I readily consented. He returned in a few weeks with a still further loss of vision, said that he had consulted two or three eminent specialists, who had come no near making a diagnosis than I had done. While examining him at this time, I noticed that his heart beat very irregularly, which I attributed to his smoking, and the thought suddenly flashed through my mind possibly his failure of sight is due to the same cause. I ordered him to stop smoking, and my patient's pleasure was not much greater than mine when he found that his sight rapidly improved and at the end of three months his vision was $\frac{20}{80}$ in either eye.

I was misled by the statement so often made that tobacco amblyopia did not occur in people under thirty years of age. Since the record of this case was made three years ago, Mr. Morton has reported two cases occurring in persons under twenty-three years of age. Mr. Carter has reported one in a youth between sixteen and eighteen, and Hirschberg one in an eighteen-year-old boy.

This is the first case I have seen reported as the result of cigarette smoking, but I have no doubt others are on record which have escaped my notice.

CASE IV.

Mr. M., laborer, Irish, aged forty-five; general health

good; had ague fifteen years previously; otherwise never has been sick; gets drunk occasionally, but does not drink regularly; smokes three pounds of strong tobacco in pipe per month; has noticed sight failing for two months. V. R. E. $\frac{20}{200}$, V. L. E. $\frac{20}{100}$; large central scotoma for red and green; fundus normal so far as can be seen with ophthalmoscope. Stopped tobacco entirely; gave a bitter tonic as a placebo; in four months vision normal.

CASE V.

Mr. S., Bohemian, saloon-keeper, aged thirty-seven; drinks regularly and smokes continuously. General health fairly good; sight has been failing for six weeks; no changes to be seen in fundus with ophthalmoscope. V. L. E. $\frac{20}{100}$, V. R. E. $\frac{20}{70}$; central scotoma for red and green. Stopped the use of tobacco; gave strychnia, which was only taken for a week or ten days. Vision improved rapidly, and at the end of three months was $\frac{20}{30}$ in either eye.

CASE VI.

Mr. M., farmer, American, aged 53, general health good, teetotaler, does not smoke but chews to excess; swallows much of the saliva; vision has failed rapidly for the past three months; no pathological changes in retina or optic disk; vision $\frac{30}{200}$ in each eye; central scotoma for red and green. Stopped use of tobacco; eyes commenced improving at once; patient writes me at the end of six months, "can see as well as ever."

These last three cases are typical ones of tobacco amblyopia, and present as clear and well-defined a group of symptoms as any disease for which we are called upon to prescribe. They are as well marked and as uniform as those of intermittent fever, and to deny the existence of tobacco amblyopia because there are no pathological changes to be found with the ophthalmoscope, would be as unreasonable as to deny the existence of ague, the pathology of which we know less.

It will be seen of these six cases, three never used alcoholic stimulants, two drank regularly and one occasionally.

The essential diagnostic features of this disease are, first, a history of using tobacco either by smoking, chewing, or by exposure to its effects in some other manner; second, a rapid failure of sight; third, no pathological changes discoverable by the ophthalmoscope sufficient to account for the failure of sight; fourth, a large central scotoma for red and green—sometimes for other colors as well; fifth, rapid improvement of vision, when the tobacco habit is given up, without other treatment.

It is quite possible that we may meet cases complicated by a neuritis or even an atrophy of the optic nerve, and consequent limitation of the field of vision in the periphery. In such a case we would expect to find changes in the optic disk, and when the tobacco habit was stopped, we would have some improvement of vision, but not perfect recovery. A careful inquiry into the history of these cases will usually reveal some cause for the failure of sight other than the use of the tobacco, among which we may mention alcohol, lead, quinine, opiates, syphilis, depressing emotions, malarial poisoning and pernicious anæmia.

As to the frequency of this affection, it is difficult to arrive at any definite conclusions, owing to the unreliable character of the statistics furnished. Clearly several affections have frequently been classed together as all due to the excessive use of tobacco. Some observers have placed the proportion at from seven to ten out of a thousand patients. This estimate is probably over than under the true proportion of cases—one-half of one per cent. would probably be a fair estimate.

When we consider that a large proportion of the male, and quite a minority of the female population of the world use tobacco, and frequently to excess, it is surprising that tobacco amblyopia is not more frequent. Yet I presume there is nothing more remarkable about this than many other things which come under daily observation of physicians. Notwithstanding the immense amounts of alcoholic stimulants

used, delirium tremens is not a very common affection. A certain peculiar sensibility—idiosyncrasies, if you please—to certain drugs is one of the well-established facts of all therapeutic medication. It is only necessary to mention iodism, anæsthetics, opium, pregnancy, hysteria, madness, to call up a whole series of unpleasant reminiscences of the unusual effects of medication in the mind of the physician.

I will not attempt to explain *how* tobacco affects one individual with a peculiar form of blindness while hundreds escape, so long as I am not able to offer a plausible explanation of why those delicious strawberries we ate yesterday proved to be the rankest poison to my wife. Or when someone offers me a plausible explanation of why the sight of blood or even a beet root will produce syncope in some persons, or why others are annoyed by the exhalations from a cat, or why with many persons gastric pain is caused by eating eggs, honey, sugar or fish; why the smell of musk will cause some persons to have spasms, and others will have an attack of asthma from pulv. ipec, I may be able to explain why some people have this idiosyncrasy to the use of tobacco when they are fully explained to me.

I myself have struggled against a peculiar antipathy to the odor of celery all my life. I do not dislike the taste, but the odor is almost unbearable. Shakespeare had noticed some of these idiosyncrasies, for he says :

"Some men there are love not a gaping pig,
Some that are mad if they behold a cat,
And others, when the bag-pipe sings a th' nose,
Cannot contain their urine."

—*Merchant of Venice.*

Whether the affection is attended by any pathological changes in the retina, optic nerves or cerebral centers, is a question of very great importance and has a direct bearing upon the treatment. If the disease is characterized by an inflammation or hyperæmia of the optic nerve or cerebral centers, as some have claimed, antiphlogistics and iodide of potash would be indicated; if it is characterized by an atrophy of the optic nerves or anæmia of the cerebral centers, stimulants and strychnia would probably be the proper thing. Dr.

Powers has advised the inhalation of nitrate of amyl as of great temporary benefit. I must confess that in the few cases I have used it my results have been negative.

If there are no pathological changes in the retina, optic nerves or cerebral centers, then the necessity for specific medication is uncalled for.

I may summarize my conclusions on this subject as follows:

1. There is a toxic ambylopia due to the excessive use of tobacco.

2. That the excessive use of alcohol or other toxic agents does not produce the same or a similar ambylotic condition, although by their depressing influence on the vital functions they may serve as predisposing causes.

3. Tobacco ambylopia does not usually lead to total blindness. The disease is essentially a functional one. Gross pathological changes have not been demonstrated, either in the retina, optic nerve or cerebral centers.

4. The course of the disease may result in a certain amount of failure of sight and then remain stationary, even though the tobacco habit be not entirely given up.

5. Stopping the use of tobacco will result in recovery of sight without the use of specific medication, although the use of strychnia and tonics, by increasing the general tone of the system, may hasten the cure. The moral effect of taking something to replace the loss of the tobacco is of great value.

RADICAL CURE FOR HERNIA, COMPLICATED BY PERI-CÆCAL ABSCESS.

BY THOMAS KAY, M. D.,

Surgeon to Johonnites Hospital, Beyrout, Syria.

Bashâra, a native of Beyrout, aged 18, was sent me by my friend, Dr. Wm. T. Van Dyck, in November, 1887, for a radical operation for hernia. The trouble was acquired, dating back some eight months, from heavy lifting, and had been

constantly increasing, because of inability to wear a truss on account of the pain produced. Examination showed a complete hernia of the right side of the oblique variety, which could readily be replaced, the abdominal opening being large enough to admit the ends of three fingers. Six months before I saw him, he had had a peri-cæcal inflammation, which had yielded to absolute rest, together with the vigorous application of fomentations and leeches. There was at present some tenderness in the right iliac region, though distinct induration could not be felt. He entered the hospital for an operation, but left the next day at the instigation of his friends. Two months later, however, he reported again, desiring an operation at his house. I now found a large encysted hydrocele in the lower portion of the sac, above which was a thickened mass, due, as I supposed, to inflammatory deposits caused by the wearing of the truss, thus producing obliteration of the sac, at that point, with the resulting hydrocele. The gut descended now only to this point, and could be readily returned. The operation was performed February 18, under all antiseptic precautions, the spray excepted, Dr. Van Dyck assisting. After making an incision two inches in length through the different tissues down to the sac, a mass of omentum was found which had become adherent, thus closing the sac and producing the hydrocele. The sac was now opened, and the piece of omentum, as thick as two fingers and much congested, came to view.

As this could not be returned, it was ligated in four separate pieces, divided below the ligatures and returned to the abdominal cavity. The sac was then separated from the cord, ligated close to the abdominal wall and divided one inch below the ligature, after which the pillars of the abdominal opening were brought together by four interrupted sutures. Then a small drainage tube was inserted in the lower angle of the wound, the cutaneous incision closed by interrupted sutures, and the whole dressed antiseptically. Catgut was the material used for both ligatures and sutures. All went well till the second day after the operation, when there was much swelling of the scrotum, and on the fourth day the hydrocele

was punctured to relieve the tension, a large quantity of watery pus being evacuated.

On the sixth day after the operation, I removed with forceps from the wound all of the omentum which had been cut off and left closing the sac. This had sloughed because of the lessened blood supply to the part, and was removed without pain or bleeding, establishing a communication between the sac of the hydrocele and the drainage tube. Ten days after the operation, February 28, the old peri-cæcal inflammation seemed to be rekindling, and an indistinct tumor could be felt. This on March 2 had become much larger, and, as indistinct fluctuation could be felt, I determined to aspirate. Though the largest needle was used, only a small quantity of pus could be drawn off, it being so thick and of a greenish color, with a very offensive odor. The next day, as there was still fluctuation, I attempted to open the abscess with a scalpel, but not striking pus at a depth of one and a half inches, a stout director was substituted, which was passed down in the track of the needle for three inches, when pus was reached. The opening was enlarged by tearing with the director, several ounces of pus evacuated, a drainage tube inserted and the cavity washed out. From that time to this, March 27, there has been a steady convalescence, the wounds being now healed and the man going about, though there is yet much induration in the right iliac region. The hernia is cured, and there is every reason to believe that it will be permanent. The peri-cæcal abscess does not seem to have been caused by the operation, for, from the nature of the pus, it must have been encysted for a long time, though it probably excited anew the inflammation. This is now my ninth operation for the radical cure of hernia, and in no other case have I had more serious trouble than a scrotal abscess.

[NOTE.—Mr. Bryant, in his 'Manual for the Practice of Surgery,' 4th ed., Vol. I., p. 738, says hydrocele of the hernial sac is a very rare affection, and not more than six cases are on record. This will, so far as known, make the seventh.]-ED.

CORRESPONDENCE.

CINCINNATI LETTER.

MR. EDITOR :—Thinking perhaps you might feel an interest in this end of the state, and knowing that your excellent journal is not confined by sectional limits, I send you a short communication.

This is a proud year for Cincinnati—her many new and fine streets, her Centennial year and her very successful meeting of the American Medical association. The meeting here was one of the most harmonious and representative for a number of years, while the scientific work was the principal part of the gathering.

A surprising part of the meeting this year was the fact of the number of gentlemen who omitted to register. Some objected to this enforced subscription to a journal they did not consider worth the money demanded ; others would not subscribe to the extract from the by-laws, and still others were either too poor or too stingy. Twelve hundred registered and the attendance was several hundred more at the meetings, while the attendance at the Art museum reception reached two thousand two hundred and twenty-five. Ice cream and strawberries always were popular, but were probably not more valued as compared with science in Cincinnati than other cities. It is to be regretted that our daily papers did not do as well by the association as those of other cities at which it has met during the past few years. They did well and evidently thought they were doing famously, but yet not so well as your correspondent has seen.

Sadness has been freely mingled with our joy during the past few weeks. The medical profession has suffered losses from which it will hardly recover. Dr. C. S. Muscroft, one of the fathers of Cincinnati medicine, died at his post just at the time when the hosts of the American Medical associa-

tion were gathering together. He was attending to the needs of a patient in his office when, having cause to reach to a considerable height, he fell dead from heart disease. Born in England in 1820, he came to this country with his parents when only two years of age. In 1839 he began the study of medicine, and in 1855 began to turn special attention to surgery, which has continued to be his specialty since that time. He was Cincinnati's first health officer, being appointed during the cholera epidemic of 1849. He was first surgeon to the Tenth Ohio infantry, and then brigade surgeon, medical director and inspector of the hospitals of the army. He had served as president to the Academy of Medicine, director of Longview asylum, surgeon of the Cincinnati hospital, and at the time of his death and since 1865 he was president of the staff of St. Mary's hospital. His contributions to medicine and surgery have been numerous and practical. Only last year he read before the Academy of Medicine on "A New, Simple and Safe Method of Preventing Hemorrhage, Treating Aneurisms and Applicable to Other Surgical Conditions," and presented a case of successful amputation of the hip joint and a case of amputation at the shoulder joint, where the method was put into practice. His plan was to pass a strong pin or needle under the femoral vessels *en masse* high up in Scarpa's triangle, and then, by winding a cord about the exposed ends of the needle, protected by corks in a figure of 8 turn, to secure sufficient pressure to completely occlude the artery. This method of compression before the operation could do no harm, and if properly applied, there could be no hemorrhage. The additional advantage would be secured that there were no tourniquets or bandages to slip when their points of resistance were removed by the disarticulation of the head of the femur, and the apparatus for controlling the hemorrhage was not at all in the way of the operator or his assistants. This paper was not only widely published in this country but also in Germany. Dr. Muscroft had taken a great interest in the Cincinnati meeting of the American Medical association, and had subscribed liberally to its support. He was to bring

before the association his new method of controlling hemorrhage, and was a delegate from the Cincinnati Academy of Medicine. He was a graduate of the Medical College of Ohio.

Dr. C. D. Palmer, professor of obstetrics, gynecology and clinical diseases of women, Medical College of Ohio, obstetrician to the Cincinnati hospital, met with a serious and possibly fatal accident on the Sunday preceding the meeting of the American Medical association. His horse ran away down a long hill and threw him from the buggy under a culvert. When picked up he was insensible and remained in this condition for two days, being partially unconscious for the succeeding two weeks. The doctor is at the present time president of the Academy of Medicine, and filling so many positions of professional honor, he is a man who cannot well be missed. Mrs. Palmer and the sons have had their grief much mitigated by the many messages of condolence and esteem not only from the people at large but also especially from the medical profession, with whom the doctor stands so high. It was, in part, Dr. Palmer's money which entertained the A. M. A. here so hospitably while he lay unconscious, hovering between life and death.

Dr. Joseph Aub, one of Cincinnati's most prominent oculists, has passed from our midst. He was in rather poor health for some time, but improved and took an active part as a member of the finance committee of the committee of arrangements of the American Medical association meeting in this city. Just on the eve of their meeting here the doctor was taken seriously ill, and died a short time after the meeting dispersed. Dr. Aub was born within a few feet of the place where he died. He graduated from the Medical College of Ohio in 1866, and continued his studies in Germany, taking a degree in Erlangen. In Paris he studied under Liebreich; afterwards with Von Græfe of Berlin. He enjoyed a large and very lucrative practice, and died worth \$250,000. He leaves a wife and daughter. The death of

Dr. Aub and the retirement of Dr. Williams leaves a great vacancy in ophthalmology in Cincinnati.

Dr. W. W. Dawson, as president of the American Medical association, is an honor to Cincinnati, to western medicine and to the association. Few are as popular in the profession as he. Possessed with that wisdom and experience which is alone found with long years of practice, founded upon an intellect seldom the good fortune of one man to possess, accompanied by what is frequently found to be absent when these qualifications are present—great social qualifications—he will make a president who will do honor to the association, the profession and his native city.

Dr. P. S. Connor, chosen to deliver the general address on surgery at the next meeting, insures an address of interest, profit and scholarship. Dr. N. P. Dandridge, also of this city, will preside over the section on surgery with credit to himself and the branch which he represents, and the genial secretary of our academy, Dr. G. A. Fackler, as secretary of the section on medicine, will doubtless give the same general satisfaction which he has done for so long at the academy.

The hope of your correspondent is that the cycle which brings the American Medical association again to Cincinnati may not have a very great diameter.

E. S. M.

The Cleveland Medical Gazette.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY

ONE DOLLAR PER ANNUM IN ADVANCE.

Vol. III begins with November, 1887. Subscriptions can begin at any time.

REMITTANCE OF MONEY.—All money should be sent by P. O. Order, Postal Note or Registered letter. In no case should money be sent by check, except on New York or this city.

Original Communications, reports of cases and local news of general medical interest are solicited. All communications should be accompanied by the name of the writer, not necessarily for publication.

All letters and communications should be addressed to the CLEVELAND MEDICAL GAZETTE, No. 143 Euclid Avenue, CLEVELAND, OHIO.

Changes for advertisements must reach us not later than the second week of the month to be corrected in current number, addressed to W. N. GATES, Manager Advertising Department, 10 Public Square.

EDITED BY A. R. BAKER AND S. W. KELLEY.

EDITORIAL.

THE AMERICAN MEDICAL ASSOCIATION.

THE recent meeting of this old association in Cincinnati was one of the most successful in the history of the organization. The medical profession in Cincinnati did everything possible to add to the comfort and enjoyment of their numerous guests. The informal reception Tuesday evening at the Burnett house was a most enjoyable affair, while the reception at the Art museum was one of the most elegant that could be imagined. The contrast between the orderly manner in which the refreshments were served and eaten was in striking contrast with the mad rush and indiscriminate fighting indulged in at the International congress at Washington last fall.

The Music hall was well adapted for such a gathering, and the advantages of being able to hold all the meetings in one building are apparent. As to the scientific work done, it is somewhat difficult to give at this time a proper estimate of

its value. Undoubtedly it was as good as previous meetings, but it is unfortunate that more scientific work is not done in this large representative body of the American medical profession. Many valuable papers have been contributed to the transactions of this venerable association, and we believe the addresses before the general session will compare favorably with any of those of the previous meetings, or with those of any other similar medical society. There were many good papers contributed to the section on obstetrics and diseases of women. The sessions of this section were largely attended, and the discussions were spirited and instructive. The new section on dermatology did much good work, and the same might be said of most all the sections.

There are a few men connected with this organization who are mere wire-pullers, medical politicians, men who never contribute anything to the scientific workings of the society, but spend all their energies in securing offices for themselves or friends. They are never seen in the section work, and their only field of usefulness is to be present when any business is to be transacted or officers to be elected. They are constantly sowing seeds of dissension and discord.

Any superficial observer could see that the vast body of physicians present were there with proper motives. Their only aim was to contribute to the success of the scientific work of the association, and while they were busily engaged in doing work in the sections, they permitted these objectionable characters to slip around and set up schemes and do dirty log-rolling, and bring the entire association into disrepute. We were pleased to note that all their schemes did not work, and we hope the time is not far distant when the better element in the profession will relegate this undesirable faction to the obscurity their attainments entitle them to occupy.

If the American Medical Association continues to occupy a position creditable to the profession in America, it will be by the amount and value of scientific work done by the association. It must not degenerate into a medico-political machine, but must endeavor to occupy prouder place among the scientific bodies of the

world, by doing good, honest, hard work. A move was made in that direction at Cincinnati by having a resolution passed permitting the sections to hold two sessions daily, but for some unaccountable reason a resolution was introduced before the end of the session prohibiting the holding of the morning session, and as a result, many of the papers were read by title only.

Another feature of these meetings which ought to be remedied is the method of presenting papers. There ought to be some method of weeding out the chaff. More than two-thirds of the papers are of no value whatever, and under the present method of receiving contributions, there is no means of preventing the most ignorant, stupid or loquacious individual in the whole profession from consuming the valuable time of the members. Either papers should be presented to local societies and referred by them to the association, or they should be submitted to the president and secretary of the sections or other competent judges for examination before being given a place on the programme.

There are many other abuses connected with the present management of the association to which much space might be devoted, one of which occurred in the ophthalmological section. A gentleman whose name did not appear on the programme came there from an eastern city. Had published in a morning paper a glowing description of an operation performed by himself, a report of which would be read the next day before the association. The operation was stated to be one of the most remarkable ever made, the first in the country, requiring a delicate skill and special instruments, etc., all of which was known to be perfectly false by anyone with the slightest acquaintance with the literature of ophthalmology. But notwithstanding all this, the gentleman was permitted to take precedence of many gentlemen who had been there all week and whose papers were announced in the regular programme.

THE MISSION OF THE AMERICAN MEDICAL ASSOCIATION.

The address of the president, Dr. A. Y. Garnett, was a masterly one, dealing with the question of a higher medical education from a practical standpoint, and it is to be hoped that something tangible may be secured as a result. The proposition "that the faculties of the several medical schools within the limits of the United States be once more urgently requested to call a convention at some central point for the purpose of consultation and adopting some general and uniform system of medical education more comprehensive and rigid in its requirements and more in accord with the spirit of the age and the advanced progress of medical science, suggesting a four years' course of study the requirement of a preliminary education, including some knowledge of the classics.

"That any college or school which shall refuse to enter into such an arrangement as may be decided upon by said convention shall be excluded from all connection with the American Medical association, and its alumni not recognized as members of the regular profession," is one that should receive the hearty approval of every member of the association, and the support of every intelligent member of the medical profession. We hope the medical press will unite in making such a unanimous call upon the faculties of the various medical schools to take some action with regard to this matter that they will be heard. Some states have already passed laws which require certain standards of medical education of each applicant for license to practice within the state. We hope the profession of Wisconsin, California and Illinois will see to it that the graduates of those schools which do not fulfill the letter of the law in their requirements for graduation are excluded from practice in their several states. We hope the profession in other states will continue to urge the matter of medical legislation upon their legislative bodies. If they cannot secure such laws as are desirable, secure such as can be had. We hope the various medical

societies, county, district and state, will see that all laws are enforced with regard to illegal practitioners. And if every member of the profession does his duty and only sends his students to such colleges as require a preliminary education and a graded course of instruction, the day will not be far distant when there will be a different condition in the standing of the medical profession in this country.

But so long as medical colleges are permitted to exist in the state of Ohio, graduating in medicine, upon the attendance of two courses of lectures of four or five months each, boys by the dozens who have not passed through the grammar schools in our cities or have never attended any but the district school a few terms in the country, we must not expect to be called a learned profession.

Such a condition of affairs is a disgrace to a civilized country. When such men are poured out upon the community every year by the thousands as doctors of medicine, carrying large Latin diplomas which not one in twenty can read, it is not surprising that the community does not always distinguish between the physician and the charlatan.

The charlatan often has the *appearance* of a gentleman, at least, while many of the so-called regular profession have not even the appearance, much less the substance.

The charlatan and quack often has at least enough education and has come in contact with the world to such an extent as to at least impress his clientele with the idea that he has some knowledge, while many of the regular profession show their ignorance and low breeding and general unfitness to belong to a learned profession upon every occasion. They could not deceive the most obtuse.

Hence we say by all means let the mission of the American Medical association be a higher standard of medical education. We shall be glad to hail the day when some mental, moral and professional fitness will be among the qualifications required to become a member of the American Medical association, as well a member of the noble, grand and good profession of medicine.

NEW BOOKS.

'THE MODERN TREATMENT OF EAR DISEASES.' By Samuel Sexton, M. D. The Physicians' Leisure Library. Published by George S. Davis, Detroit, Michigan. Price 25 cents.

This little work presents a classified list of over two thousand consecutive cases of ear diseases treated at Dr. Sexton's aural clinic at the New York eye and ear infirmary. It is interesting to note that of the twenty-one hundred cases six hundred and sixty-two were cases of non-suppurative otitis media and six hundred and eighty-nine were cases of suppurative otitis media, while there were but thirty-eight cases of diseases of the mastoid process. Although this little book makes no pretensions to be a systematic work on ear diseases, there are few diseases pertaining to this important organ upon which practical hints as to treatment may not be gained by the general practitioner as well as by the specialist. While the nomenclature and classification of diseases of the ear, given at the end of the book, is incomplete and may not meet the views of all writers on aural diseases, it is, to our mind, quite satisfactory.

'CONTRIBUTION TO THE STUDY OF THE HEART AND LUNGS.' By James R. Leaming, M. D. E. B. Treat, 771 Broadway, New York, 1887. Price, \$2.75.

These monographs, which appeared at different times in medical journals and in the transactions of medical societies, are here collected with dates and places of first appearance given. This gathering together in one volume the various articles an author has contributed to the medical periodicals and society proceedings during a long series of years, is always a pleasing one to the writer and to those readers who have followed him from time to time. Such a book cannot fail to be of interest.

If space permitted, we would give a list of contents in full, but must content ourselves with naming the following articles, some of which, no doubt, many of our readers will recall: "Pleuritis," read before the New York Academy of Medi-

cine, March 17, 1870; "Respiratory Murmurs," *ibid.*, January 4, 1872; "On Hæmoptysis," New York Journal association, 1875; "Endemic Pleuro-Pneumonia, as Seen in New York During the Past Ten or Twelve Years;" "Transactions New York State Medical Society for 1880;" "Is Consumption Communicable?" *New York Medical Journal*, December 1, 1883; "Cardiac Murmurs," New York County Medical society, April, 1868; "Therapeutics of Muriate of Ammonia," *New York Journal of Medicine*, 1854.

NOTES AND COMMENTS.

The Journal of the American Medical Association.—We quote the following from the Cincinnati correspondent of the *Philadelphia Medical and Surgical Reporter*: "I am betraying no secret when I say that there is a deep dissatisfaction on the part of many members of the association here with the way the *Journal* has been conducted; and there is a feeling that if its increased revenues have been secured by the abuse of its pages by advertisers during the past year, the association cannot congratulate itself upon this fact.

"I hear a great deal of complaint that the *Journal* is not what it was intended to be, namely, a substitute for the volume of transactions. Men complain that the proceedings of the association are not properly reported in the *Journal*, and that the papers are not published in regular order or according to any well arranged plan. They say here that it is too much filled with the proceedings of the Chicago and Illinois societies, and that papers read at the meeting are pushed aside to make room for papers which have not been presented to the association at all, and which were written long after the ones which they have displaced." But we suppose there should be no complaints, because it is quite English, you know!

The Drs. Humiston have fitted up a private surgical home for women at 829 Scranton ave. They have gone to great expense to make the place as nearly perfect as possible, and would be pleased to have the profession call and see it.

Ohio State Medical Society.—The next annual meeting of this society will be held at Columbus, Wednesday, Thursday and Friday, June 13, 14, 15. The following written communications are announced :

- a* "Radical Cure of Hernia." (With Exhibition of Cases.) D. F. Allen, Cleveland.
- b* "Radical Cure of Hernia." A. W. Ridenour, Massillon.
- c* "Contagiousness of Disease." H. J. Herrick, Cleveland.
- d* "The Treatment of Acne." B. M. Ricketts, Cincinnati.
- e* "Ergot and its Uses in Labor and Uterine Hemorrhage." D. H. Brinkerhoff, Fremont.
- f* "Malpractice Suits." P. S. Conner, Cincinnati.
- g* "An Experimental Demonstration of the Value of Gaseous Enemata in the Diagnosis of Perforations of the Intestines and their Repair by the Rubber Ring and Decalcified Plate Method." R. Harvey Reed, Mansfield.
- h* "The Therapy of Tuberculosis." J. T. Whittaker, Cincinnati.
- i* "Tubercular Diathesis." W. C. Chapman, Toledo.
- j* "Four Cases of Diabetes Mellitus, which I did not cure." W. J. Scott, Cleveland.
- k* "On the Consequence of Acute Suppuration of the Middle Ear, with Special Reference to Opening the Mastoid." A. R. Baker, Cleveland.
- l* "Laparotomy for Rupture of Uterus—with Report of a Case." Chas. A. L. Reed, Cincinnati.
- m* A paper by J. W. Hamilton, Columbus.
- n* "Treatment of Fibroid Tumors of the Uterus by Electrolysis, as advised by Apostoli." A. B. Carpenter, Cleveland.
- o* "The Importance of the Early Recognition of Glaucoma." H. P. Allen, Columbus.
- p* "The Value of Eye Symptoms to the General Practitioner in Diseases of the Nervous System." C. W. Tangeman, Cincinnati.
- q* "Diseases of the Skin due to Defective Alimentation." W. T. Corlett, Cleveland.
- r* "Two Cases of Ectopic Gestation," and "Excision of Upper Jaw for Bony Tumor." W. D. Hamilton, Columbus.
- s* "The Painless Treatment of Rectal Diseases." H. M. Brown, Hillsboro.
- t* "Indigestion." J. U. Barnhill, Columbus.
- u* "Infant Feeding." W. S. Christopher, Cincinnati.
- v* "A Case Illustrating the Relation existing between Diseases of the Eye and Nose." C. F. Clark, Columbus.
- w* "The Treatment of Pott's Disease—with Cases." H. Longstreet Taylor, Cincinnati.
- x* "Elastic Extension in the Treatment of Chronic Inflammation of Joints." S. L. McCurdy, Dennison.
- y* "A Rare Case of Orbital Tumor." J. W. Wright, Columbus.
- z* "Some Interesting Cerebral Lesions as Revealed by Post-Mortem Examinations, and a Study of their History and Symptoms." R. Harvey Reed, Mansfield.

The sessions of the society will be held in Wirthwein Hall, No. 337 South High street. First session at 2:00 P. M., Wednesday, June 13. (White Line cars from Union depot.)





Al. Hiller

—THE—
Cleveland Medical Gazette.

VOL. II.

JULY, 1887.

No. 9.

ORIGINAL ARTICLES.

**WHAT ARE THE LAWS OF OHIO REGULATING
THE PRACTICE OF MEDICINE AND SURGERY?
AND WHAT IS NEEDED TO PROTECT PEOPLE
OF THE STATE FROM IMPOSTORS?***

BY W. W. JONES, M.D., TOLEDO, OHIO.

THE subject of regulating the practice of medicine in Ohio by law has agitated the profession ever since the organization of this society, now forty years, and notwithstanding attempts have been continually made to have them conform to an enlightened view for the protection of the people against the evils of charlatanry, they yet are far short of shutting off the serious evils under which communities groan and die through the so-called liberty of pretenders and quacks to trifle with human life. This statement will be confirmed by the observation and experience of every physician in the state, and the evil has become worse of late years instead of better, on account of protection laws enacted by other states, which have driven these frauds from their borders to find other fields in which to impose upon a credulous public.

* Read before the Ohio State Medical Society, at Toledo.

Let us review these laws and see what they are. They will be found in Section 4,403 and its supplement, and Section 6,992 of the Revised Statutes, and are as follows:

SECTION 4403. "No person who is not a graduate of a reputable school of medicine either in the United States or a foreign country, or who can not produce a certificate of qualification from state or county medical society, and is not a person of good moral character, shall practice or attempt to practice medicine in any of its departments, or prescribe medicine for reward or compensation, for any person within this state, except that when a person has been continuously engaged in the practice of medicine for a period of ten years or more, he shall be considered to have complied with the provisions of this chapter, and when a person has been in continuous practice of medicine for five years or more, he shall be allowed two years in which to comply therewith. Provided, however, that any person who shall have graduated at any school of medicine in any state or foreign country in which any condition or restriction is imposed by the laws thereof upon the practice of medicine by the graduates of medical schools in Ohio, shall be subject to the same restrictions or conditions in the practice of medicine in this state as are imposed upon such graduates of medical schools of Ohio by the laws of such state or foreign country, and a person violating this section shall not be entitled to any compensation for services rendered." (O. S., vol. 82, page 218).

SEC. 6,992. "Whoever prescribes or practices or attempts to practice medicine in any of its departments, or performs or attempts to perform a surgical operation, without having attended two full courses of instruction and graduated at a school of medicine, either in this or a foreign country, or who can not produce a certificate of qualification from a state or county medical society, except that when a person has been continuously engaged in the practice of medicine for a period of ten years, or more, he shall be considered to have complied with the provisions of this chapter; and when a person has been in continuous practice of medicine for five years or more, he shall be allowed two years in which to comply therewith;

shall, for the first offence, be fined not more than one hundred nor less than fifty dollars, and for any subsequent offence be imprisoned for the term of thirty days." (O. S. 78, page 183).

SUPPLEMENTARY SEC. 4403a. "Whoever shall make, issue or publish for purpose of sale, barter or gift, any certificate, diploma, or other writing or document, falsely representing the holder or receiver thereof to be a graduate of any medical school or college, or of any educational institution of medicine whatsoever, and entitled to the powers, privileges, or degrees thereby pretended to be conferred; or whoever shall sell or otherwise dispose of, or offer to do so, any such diploma, certificate, writing or document containing the false representation aforesaid; or, whoever shall use his name, or permit the same to be used as a subscriber, for any purpose or in any capacity to such false and fictitious diploma, certificate, writing or document aforesaid, or whoever shall engage in the practice of medicine and surgery under and by virtue of such fraudulent diploma, certificate, writing or document aforesaid, upon conviction thereof, shall be subject to the penalty prescribed in section four thousand four hundred and three b."

SEC. 4403b. "Whoever shall make, issue or publish, or cause to be made, issued, or published for the purpose of sale, barter or gift, any diploma, certificate or writing representing the holder thereof to be a graduate of any medical school or college, or of any educational institution of medicine whatsoever, unless such holder shall have, in fact, attended a complete course of instruction in such school, college or institution for medical teaching, which course shall be equal to the average course of instruction in other schools, colleges or institutions where the various branches of medicine are taught as a science, in good standing in the state of Ohio, upon conviction thereof, shall be fined in any sum not exceeding one thousand dollars, nor less than one hundred dollars, or imprisoned in the penitentiary not more than three years, nor less than one year, or both, at the discretion of the court."

In a paper read by invitation before the Cincinnati Academy of Medicine, by R. de V. Carroll, attorney at law, and published in the *Lancet and Clinic* of that city in February, 1887, this author, after quoting these statutes, says: "This comprises about all the Ohio laws on these subjects; but it seems to me if it were faithfully carried up, the path of the medical fraud might be made one of thorns."

"There is no great expense connected with the punishment of offenders against these laws. All that is required is that a warrant be sworn out and that some one prosecute the case as a witness. The employment of an attorney is not necessary, as there is both a city and a county prosecutor, whose duty it is to attend to these matters in their respective courts, viz: the Common Pleas and Police Court."

The writer quoted, although a lawyer, does not seem to appreciate that these statutes are penal (misdemeanors and felonies) that when a criminal is brought before a court and pleads "not guilty," the state is compelled to prove its case or the prisoner must be acquitted. The prisoner cannot be compelled to admit that he has no diploma or other claims to practice medicine, and neither the prosecuting witness or any one else, can swear that the defendant has none.

I know of but one instance in which the penalties of practicing medicine in the state without these qualifications resulted in conviction, and this was an aggravated one which involved the death of the patient, where the defendant admitted in court that he had no medical credentials, and the court fined him fifty dollars and costs.

These statutes have evidently been drawn upon by doctors unacquainted with the rules of law for their enforcement, and in consequence have failed to protect communities who have been outraged by medical frauds and pretenders. They are sufficient in themselves if this could be done to rid the state of a vast horde of leeches who are daily sucking the life blood of our people upon which they fatten and are sustained.

This brings up the last paragraph in the title of this paper, viz: "What additions are needed to protect the people of the

state from impostors?" The answer is clear and plain. A physician's registry law, by which we may know who is of us and who is not, will complete the links in the now broken chain through which all manner of swindling devices are practiced.

At the session of the Ohio legislature in 1885, I drew up and had presented in the senate Bill No. 389 as a further supplement (*c*) to section 4403, which together with an explanatory letter to the senator presenting it, is hereby copied:

Sixty-sixth General Assembly, adjourned session—S. B. No. 389.

Mr. McLyman—Introduced in the senate of Ohio February 1885, and referred to committee, but never reported:

A bill supplementary to an act supplementary to section four thousand four hundred and three of the revised statutes of Ohio, passed February 15, 1881 (Ohio Laws, volume 78, pages 27 and 28).

Section 1. *Be it enacted by the General Assembly of the State of Ohio*, That the following section be enacted as supplementary to sections four thousand four hundred and three, *a* and *b*, of the revised statutes of Ohio, passed February 15, 1881:

Section 4403 *c*. It shall be unlawful for any person to practice medicine or surgery in this state, without first recording his diploma or certificate upon which he claims to be entitled to practice medicine or surgery, in the office of the recorder of the county where he resides, and where such person practices upon or by public notice or advertisements in other counties than the one in which he resides, he shall record the same in each county in which he may so practice or advertise. And it shall be the duty of the county commissioners to provide the recorder with the necessary books for recording such diplomas or certificates, and such recorder shall be entitled to such fees for recording the same as may be charged for recording deeds, to be paid by the person applying for the record to practice medicine and surgery, provided, that this section shall not apply to physicians and

surgeons who may be called from other counties or states for consultation upon the sick, where there is no attempt to advertise for practice or business. Any person attempting to practice medicine or surgery, for pay or reward, without having complied with the provisions of this section, shall, for the first offense, be fined not more than one hundred nor less than fifty dollars, and for any continuous or subsequent offense, shall be imprisoned in the workhouse or county jail not less than thirty days nor more than six months, and fined not less than one hundred dollars.

Sec. 2. This act to take effect ninety days after its passage.

HON. W. H. McLYMAN, Ohio Senate:

Dear Sir:—I enclose you bill relating to the practice of medicine, requiring all physicians to record their diplomas or other evidence upon which they base their claims to practice medicine. The previous section, as you will see (to which this is a supplement), cannot be enforced because the quack will not and cannot be compelled to show his qualifications in a court of justice when arraigned, and the prosecution cannot prove that he has *not* got good and true credentials. We are so overrun by pretenders and quacks (who are driven out of other states by their laws), that our people are imposed upon, and, in many instances, either murdered or brought near death by their incompetency. It is time some protection was afforded by law to the people, the poorest and most ignorant of whom are the most liable to be imposed upon.

Numberless instances have occurred in this city, and in all parts of the state, to prove and illustrate this fact, and there is no subject involving the life and health of our people that appeals more strongly or justly to the consideration of our legislators than the one of protection against this kind of imposture, which degrades our civilization, and affects the health and life of innocent men, women and children.

The passage of this supplement will enable communities to weed out, to a considerable extent, a dangerous nuisance, and I feel confident that every *good* physician will be glad to put on record the evidence of his qualifications which might otherwise be lost.

Very sincerely,

W. W. JONES.

Toledo, O., February, 1885.

It should be made the duty of the health officer and sanitary police in cities and towns, where such an organization exists, to enforce the provisions of this section.

Objections on the part of physicians to a registry law ought not to weigh against the general good to be accomplished, and will in no wise interfere with a future law for examining boards which have been advocated for some years past.

When one comes to be assured of prejudices to be overcome, and time and labor necessary to convince a constitutional number of the members of the General Assembly to pass laws of this kind, as many of you are familiar by experience, you will appreciate the importance of making a united effort in order to succeed in getting what is needed to protect the people of the State against impostors. Let each member of this society be constituted a committee of one to bring before his member or members of the legislature when a candidate for that office this reasonable request, and obtain from him a pledge before election to vote for its passage, and the result will not be doubtful or its accomplishment laborious.

A REPORT OF TWENTY CASES OF LARYNGEAL DIPHTHERIA OR PSEUDO-MEMBRANOUS CROUP.*

BY D. L. HANSON, M. D., CLEVELAND, O.

Mr. President and Gentlemen of the Society :

The subject we present for your consideration to-day is a meager report of twenty cases of laryngeal diphtheria or its synonym pseudo-membranous croup, being the entire number seen or treated by us during the past eleven years.

The mortality has not been so low that we feel at all flattered by the results we have achieved, but quite the contrary, and if this paper would draw forth any suggestions that would be of use to us in the future management of these cases, they would be very gratefully received. The high death rate is

* Read before the Cuyahoga County Medical Society.

terrible to contemplate, but the suffering of our little patients is so great that the physician feels doubly anxious for some means of relief. The agonizing, beseeching, entreating look, the facial expression, the intense and increasing dyspnœa, and the great restlessness form a picture that could not properly be described by a pen less skillful than that of a Hugo.

Our cases have all been between the ages of one and fourteen, 30 per cent. of whom we have not seen until moribund or so nearly dead that medicine had no time to act before the fatal termination. The remaining fourteen cases were treated by various methods, hereafter described, with four recoveries and ten deaths, or counting all seen sixteen deaths with four recoveries. Death in all but one instance was due directly to the obstruction in the larynx. This one to septicæmia produced by extensive ulceration in larynx and trachea, as shown by post-mortem examination.

True croup without a distinct diphtheritic connection is something that I have never seen. In every instance it has succeeded a mild attack of pharyngeal diphtheria, the disease in larynx beginning about the time it is disappearing above, sometimes little flecks or patches of membrane and sometimes the ulcers from where they have been thrown off only remaining. I have found this condition so uniformly present that I have very little uneasiness about the larynx where there is an abundance of membrane in pharynx or nasal cavity with swelling and constitutional disturbance, while a small amount of pearly white membrane on tonsil or pillar of pharynx with little or no disturbance of general system as being one of the most alarming conditions possible—it seems to me that in those mild forms of the original disease the disease has not exhausted itself (the microbes have not spent their vitality may be), but by any exciting cause will be redeveloped in a new location, preferably the larynx. The less the membranes in pharynx, the more probable will a fatal termination be if it extend to the larynx. Probably a want of proper care in the extremely mild cases of diphtheria is a factor that should be taken into consideration, these little patients being allowed to run about, sit upon the damp

ground, and the parents not being aware of the great risk they are taking, or the extreme danger of such a course. We might illustrate this by several examples, but will mention only two. The first was a little boy three years of age, who with his parents was visiting about four miles from home. While there he seemed a little feverish and languid for two days, and as he seemed well the third morning they concluded to come home, and taking a car rode by an open window all the way. The child the following night began having a croupy cough. I was called at 4 a. m. next day, found the child suffering great dyspnœa; two or three little white patches of membrane on tonsils, no fever, very little swelling and the usual condition in these cases. Called a member of this society in consultation. Treated case with large doses (five grains) of calomel every two hours until one-half drachm was taken, followed and accompanied by active stimulation with a fatal termination within twenty hours of our first visit.

The second case that we wish to mention was a little two-year old girl who was first attacked with an extremely mild diphtheria while I was attending two older children in the same family, both very sick, one of the nasal variety. The parents were very anxious about the two elder children, and were so overtaxed and tired out from constant watching, and as the little girl was so lively and determined to run about, the parents allowed her to get out of bed and run around almost as she desired in spite of the warning I gave and repeated with emphasis. I went so far as to tell them that her condition was more alarming to me than that of either of the two other children, which statement they could not see the reason for, and like every other similar condition I have met, they would snatch the child up and put it in bed while the medical attendant was present and allow her to run about in the interval. The fourth morning of the disease, as I stepped in the door, we were greeted by what we expected but dreaded to hear, namely, a croupy cough with a fatal termination of disease four days later.

In four cases we have observed that the contagion of laryn-

geal diphtheria seemed to have a tendency to give the same form of disease, a fact which I have never seen mentioned and would like the opinion of members regarding it.

Our treatment has consisted of supporting measures, such as nourishing food, quinine and stimulants in all cases, with various other measures as the cases seemed to demand. Atomization, with steam atomizers, so as to disinfect the atmosphere of room, has been often used, but can not say that we have been able to observe any good from it. Hand atomizers are useful when the tongue can be well borne down and the medicine applied directly to membranes, which is not possible in one case in five. The breathing of the steam from slaking lime has been tried, but has always seemed worse than useless owing to the difficulty of applying it. Active stimulation will prolong life, and where stenosis is not too great and is not too rapidly developed, will probably save more lives than any other internal medication, and, fortunately, it can be used to advantage with other methods of treatment. Jacoby and some other laryngologists advise the use of hydrarg. bichloride in full and continuous doses, which seems very appropriate treatment, and combined with stimulation seems to be about the best routine treatment yet devised.

We have never resorted to operative interference of any kind. In only one instance have we advised it, and that was in a girl fourteen years of age. Her age and general condition were both in her favor had tracheotomy been performed. Her mother would not consent owing to the fact that she had seen a child die under the operation in a relative. The other cases were none of them very favorable owing the bad hygiene, and most of them being under three years of age. Intubation we have never employed. Wish some of our surgeons would supply themselves with the necessary instruments, so that we could reap the benefit of their assistance in some future emergency.

This disease, like many others, is indigenous, and no doubt physicians will have it to combat in the future as frequently as they have in the past, and as treatment has been so un-

satisfactory in the past so it will probably be in the future. Now the question naturally arises, what can we do in the way of prophylaxis? First and most sure, consequently the most important measure is isolation complete and carried out in all cases of diphtheria, until patients are entirely well and premises thoroughly disinfected (the latter for charity's sake, for the physician's effort in this line is neither appreciated nor paid for), secondly, where isolation is impossible or impracticable the various means of disinfection should be used, none of which are very reliable unless used with much more strength and thoroughness than can be done with patient in room. By changing rooms and disinfecting a room at a time while the patient is absent is about the best, most thorough and about the only course that can be pursued. In some cases, a number of whom we have met, the house contained only one room that was at all safe for patient to remain in. In such cases, of course, the only way is to use some disinfectant (perhaps sulphurous acid obtained by burning sulphur), of a moderate strength constantly present in room.

In conclusion we wish to say that if this paper is the cause of eliciting one suggestion that will be of use to us in the future management of these pathological conditions or assist in any way in lessening their dissemination, we would feel more than repaid for what little effort we have made in presenting this subject to you to-day.

CORRESPONDENCE.

Editors CLEVELAND MEDICAL GAZETTE:

DEAR SIRS:—The following case may be of interest to some of your readers:

L. C., aged 12, was taken sick April 3. I was called to see him on the morning of April 4, learned that on the Saturday preceding he had a chill. His temperature was $104\frac{1}{4}^{\circ}$, and he complained of pain over the site of lower lobe of the right lung. There was notable dullness on percussion, diminished respiratory murmur, and increased vocal fremitus. The cheeks were of a mahogany color. As his cough was slight and there was no expectoration, and as he did not have the panting respiration so characteristic of pneumonia, I thought these physical signs might be due to enlargement of the right lobe of the liver in a vertical direction.

I saw him on evening of same day and found his temperature a trifle lower than in the morning, but seemed apathetic, dull, stupid. From this time on his temperature was very irregular. It did not follow any typical course, sometimes lowest in the evening, and sometimes lowest in the morning, but was a little lower than on the first day I saw him.

On the fourth day of disease his bowels became tympanitic and he complained of pain in the right illiac fossa on pressure; he had no diarrhoea, but passed immense quantities of urine of high specific gravity. During this time he was delirious, had subsultus tendinum, saw a multitude of curious objects, in fact had all the nervous and abdominal symptoms of typhoid, but had no diarrhoea nor the typical range of temperature.

Still he complained of pain in the right side higher up than at first, but had very little cough and expectoration, but still the physical signs indicative of consolidation persisted.

The respiration was rapid, otherwise quite normal. It was

not panting. On Thursday night his father thought his temperature came down to the normal. He said the boy felt cool, but the nervous symptoms still persisted and he did not sleep. I took his temperature Friday morning and found it $102\frac{1}{2}^{\circ}$. On the evening of the same day $101\frac{1}{2}^{\circ}$. I left my clinical thermometer to be used Friday night in case the temperature should be suspected to be down to the normal. His temperature was taken at 10 o'clock that evening. On examining the thermometer Saturday morning I was surprised to find the temperature had been 1° below normal. I immediately took his temperature in the axilla and found it to be 95° . Not satisfied with this I placed it under his tongue and found it registered 96° .

During the whole day (Saturday) he was delirious, getting out of bed, picking at the bed clothes, and saw various curious things. It should be remarked, however, that with this subnormal temperature his respirations were rapid, 25 or 26 per minute, and his pulse 60 and very feeble. On Saturday evening, seventh day of the disease, he broke out in a profuse perspiration, fell into a nice refreshing sleep, from which he awoke Sunday morning in a very weak condition but not at all delirious.

His temperature was below the normal for several days but gradually returned to normal. When last seen he was doing well. The lung was clearing up nicely. My diagnosis was pneumonia with typhoid symptoms, or the so-called "typhoid pneumonia."

But what caused the abdominal symptoms alluded to?

Why was he delirious with a temperature $2\frac{1}{2}^{\circ}$ below normal? What was the cause of the excessive polyuria alluded to?

Treatment. Commenced treatment with a mercurial purge. Gave quinine in two grain doses every three hours. Bromide of potass. and morphia for nervous symptoms. For low temperature gave ammon. carb., atropia sulph., and alcoholic stimulants in moderation.

Hoping this may find favor in the columns of your esteemed journal, I am yours, fraternally, W. H. STROUP.

Spencer, O., April 25, 1887.

The Cleveland Medical Gazette.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY

ONE DOLLAR PER ANNUM IN ADVANCE.

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A. R. BAKER AND S. W. KELLEY, *Editors.*

EDITORIAL.

DR. A. C. MILLER.

DR. A. C. MILLER of Cleveland, O., who died so suddenly on the evening of June 21, was one of the most prominent members of the profession in this community. He was born in Salt Creek township, Holmes county, Ohio, September 7, 1832. His early educational opportunities were but meagre, which misfortune he always sadly regretted, and which probably prevented him from taking front rank among the physicians of this country. He was a graduate of Sterling Medical College at Columbus, and in 1868 took his degree at Bellevue Hospital Medical College, New York. During the entire war of the Rebellion Dr. Miller served as surgeon, occupying several responsible and arduous positions, which he filled with credit to himself and honor to the profession. He practiced medicine for a number of years at Orrville, this state, and removed to Cleveland in 1875. Dr. Miller was one of the leading men in the reorganization of the faculty of the medical

department of Wooster University, and his personal popularity and the advantages offered by his large gynecological clinics have contributed largely to the success of that school. As a lecturer he was forcible and entertaining and popular with the students, and an occasional lapse in grammar or pronunciation seemed to add to the interest of the discourse while not detracting from its practical merits. Although Dr. Miller has contributed but little to medical literature, he was a member of a number of medical societies, and always took part in the discussions; and his remarks, often valuable, have been preserved in the transactions of the societies. His private practice was large, and probably few men are more highly esteemed by their patients. He was an original thinker, always had opinions of his own, and never was afraid to express them. In his intercourse with his colleagues he was courteous and kindly.

Although Dr. Miller appeared an unusually robust man, he had suffered from some nervous troubles during the last eight or ten years of his life. His sudden death (while seated talking to a couple of patients at University Hospital), is attributed to paralysis of the heart. The results of the autopsy were not entirely satisfactory, owing to the fact that the undertaker had injected several quarts of preserving fluid into the brachial artery. However, no heart lesion was discovered. There were evidences of an old inflammation of the cerebral meninges, showing adhesion along the margins of the superior longitudinal sinus, with some osseous formations in the membranes. But nothing was to be found in the brain or medulla to account for his sudden death.

TAIT'S OPERATION.

Mr. Thomas M. Dolan, writing editorially in *The Provincial Medical Journal*, says:

"Mr. Lawson Tait is very largely responsible for the number of operations performed of late years, called by different

names, but all ending in the removal of ovaries or tubes. He encouraged the operations:—

1. By so freely explaining and showing his operations to all who cared to see him operate.
2. By his great manipulative skill and rapidity of action.
3. By the simplicity surrounding his operations.
4. By the absence of all the usual antiseptic precautions, and simplicity of his dressings.

Mr. Tait has so frequently expressed his views on, when and why removal of the uterine appendages should be performed, and so often condemned indiscriminate operation—even more strongly than any of the strongest opponents of the operation, that all he can do now is to close his operating room to students and strangers. There is danger, even in education. We must close our best school lest the pupils mistake their lessons. We had been anxious for some time to see Mr. Tait operate, in order to satisfy ourselves as to the method he adopts, especially to see the incision he makes, and therefore we went to Birmingham. We may premise that Mr. Tait was only known to us by his published writings, and we went with a very open mind prepared to condemn, if necessary, and determined to publish what we saw. We wrote asking to attend one of his operations, to see a typical operation for removal of the appendages, and Mr. Tait fixed on the fourteenth of September, 1886. We drove from his house to the hospital a little outside the town with Miss Clarke, M. D., who gives ether to his patients. There was an entire absence of the entourage usually attending a rare operation.

The following case was operated on, and from the hospital notes we give the particulars:—

Operation at Sparkhill, September 14, 1886.—Helen Farr, from Redditch, aged twenty-seven, married seven years, one child six years ago, very bad labour, since which she has never been well. Menstruation very frequent, very profuse, intensely painful, the pain being worst a day or two in advance of the period. These symptoms have steadily progressed in severity, especially during the last two years. She had been under several doctors, but no relief has been obtained. She

saw Mr. Lawson Tait as an out-patient, for the first time, on August 23, when an examination was made. The uterus was felt to be fixed in the left of the pelvis, hard and undulated, a large boggy swelling existed behind the uterus and to the left side. She was again seen on the thirtieth, at which time the diagnosis of hydro or pyo-salpinx was made, and the nature of her condition explained fully to her and her mother, as was also the operative proceeding which was proposed. This was accepted, and she was admitted to the hospital. The operation was performed in the presence of Professor Gardner, of Montreal, Dr. Buller, of London, and Dr. Dolan. On opening the abdomen the omentum was found to be adherent, and an aperture had to be made through it to reach the pelvic contents; all the pelvic organs were found matted together, and the uterine appendages on the left side were reached only after the separation of a number of visceral adhesions; the left tube and ovary were found matted together, the tube being occluded and distended; they were removed with great difficulty, and presented on detachment a tumour as large as a small orange, seropurulent fluid being squeezed out of the divided end of the tube readily. Examination soon showed that the ovary was completely disorganized, full of small cysts, and no normal follicles could be discovered anywhere. The right ovary was brought to the surface with some trouble, the tube was perfectly healthy and the ovary was adherent to some intestine, and presented proofs of this to the naked eye; it looked relatively healthy, however, and as the tube was uninjured Mr. Tait returned them to the abdomen, remarking at the time that he did so with considerable misgiving, because in every instance in which he had adopted this plan, the second set of appendages became so affected that they had to be removed at a second operation. The patient has made a perfectly easy recovery.

The incision was just large enough to admit Mr. Tait's two fingers, about two and one-fourth inches, and the operation was performed, considering the difficulties of the case, in a very brief time. The dressings were simple, no spray or any precautions, except absolute cleanliness. Everything was

done in order. It was so simple that a student seeing it done, would come to the conclusion, "I can do that just as well." Dr. Lynn used to tell his audience, when he had performed a more than ordinary difficult slight of hand trick, that it was very simple, and that "this was how it was done," repeating the trick; and so it seemed, but tested by the innocent who believed Dr. Lynn's statement, this trick was not so easy. In the same way the young surgeon may go away believing he can do the operation quite as well, and unfortunately medical history tells us that some poor women have suffered from this belief in the simplicity of the operation. Some have gone to Mr. Tait, and afterwards started removing ovaries not diseased, and brought discredit on the operation; hence the tears now shed over the "castrated." Clearly Mr. Tait is not to blame. The preacher preaches morality; if some of his audience imagine he is preaching *immorality*, shall we blame the preacher?

This is something very like the position:—Mr. Tait preaches that under certain conditions diseased ovaries and tubes must be removed; that only fools would do the operations done and mis-called after his name; that operations of this kind should only be done—

1. With the consent of patient and friends, and after fully explaining nature of operation.

2. With the consent of hospital colleagues.

If imitators disregard these rules, upon their heads alone lies the responsibility.

We have again had the opportunity of seeing Mr. Tait's skill. On seventeenth February he came over to Halifax to operate on a private patient of ours—a case of urgency—ruptured tube, with abundant intra-peritoneal hæmorrhage. The same remarks apply. The patient was operated on in her bedroom, without any Listerian precaution; the operation performed quickly, and the woman saved from imminent death. She is now sitting up, and virtually well. Mr. Tait will shortly publish details of this case, which makes the twenty-ninth operation of this kind he has performed with, we believe, only one death. It is a matter of regret that in con-

sidering the propriety of these operations there should be so much personal feeling; that we should have such bandying about of hard words; and that, in the hope of annoying opponents, such a term as "spaying" should be applied. Hard words evoke hard words. The early ovariatomists had to submit to much personal abuse; so the innovators must be content to suffer for a time. When success has crowned their efforts we shall have justice done to these pioneers.

MEDICAL FEE BILLS.

In our issue of April, 1886, we drew attention to the lack of uniformity and the average low rate of medical fees in Cleveland. In the present article we shall introduce for comparison fee tables from different sources.

The first is given as compiled for Leonard's Dose Book, (Published by C. Henri Leonard, Detroit, Mich.) "as apportioned by the New Jersey State Medical Society. Those prefixed by a * are taken from the Philadelphia Society's table; those in *italics* are from the Detroit schedule of prices, no specifications having been made for the same in the New Jersey schedule."

TABLE OF FEES.

GENERAL PRACTICE.

Visit when family physician.....	\$	1—2
When first visit requires minute examination.....		3—10
Each hour of detention.....		1
<i>Prescription to another member of family.....</i>		1
Visit at night.....		2—4
Single visit when not family physician.....		3—5
First visit as consulting physician.....		3—10
Each subsequent visit as such.....		2—4
If consultation at night.....		4—10
<i>Remaining all night (not obstet.).....</i>		10—20
<i>Rising at night and prescribing.....</i>		2—5
<i>Examination of insane person.....</i>		5—10
<i>Surgical visits.....</i>		3—5
Ordinary midwifery.....		10—30
Difficult midwifery.....		15—50
Mileage when above two miles.....		0.50
*Caesarean section.....		250

All subsequent visits to be charged as ordinary visits.

OFFICE PRACTICE.

Advice, no prospective treatment.....	\$	3—5
Ditto, when family physician.....		1—2
Advice when minute examination required.....		3—10

Subsequent advice for same malady.....	1-2
Written advice or opinion.....	2-20
Certificate of health.....	1-2
Gonorrhœa, <i>in advance</i>	5-20
Syphilis, " ".....	10-50
Vaccination.....	1-3
Fitting truss.....	5-10
Life insurance examination.....	4

SURGERY.

*Anæsthetic, administration of.....\$	10
Abscess or sinus, opening.....	1-5
Amputation, arm or leg.....	10-50
" *finger or toe.....	10
" *hip joint.....	250
" *shoulder joint.....	200
" thigh.....	100-500
Cataract or Iridectomy.....	100-250
Extirpation of eye.....	100-150
Other eye operations.....	10-50
Catheterization, ordinary.....	2-3
" difficult.....	3-5
Dislocation, hip.....	50-100
" shoulder.....	25-50
" elbow, knee, ankle.....	25-50
Other dislocations.....	10-20
Fistula *anal.....	25
" *perinæal.....	60
" vesico-vaginal.....	25-100
Foreign bodies in ear, nose or throat.....	5-50
Fractures, reduction and first dressing.....	15-50
Subsequent visits.....	regular charge
Hæmorrhoids.....	20-50
*Hæmorrhoids.....	25
Hernia, by manipulation.....	3-25
" by operation.....	20-100
Hydrocele, palliative.....	10
" radical operation for.....	25
Ligation of arteries.....	10-100
*Lithotomy.....	200
Mammary gland, extirpation.....	50-200
*Nævus.....	10
Necrosis.....	25-100
Paracentesis.....	10-50
Paraphimosis and phimosis.....	5-30
*Pessary, introduction of.....	5
Plastic operations.....	25-100
Polypus, uterine or rectal.....	25-100
" nose or ear.....	5-50
Post mortem.....	10-25
*Resection of large bones or joints.....	150
" *of small do.....	50
Stricture, urethral, division of.....	10-30
" nasal duct.....	25-50
Stomach pump.....	5-25
Staphylorrhaphy.....	50-200
Talipes.....	50 200
Tenotomy.....	5-25
Testicle, extirpation.....	50-200
Tonsil, excision.....	5-50
Tracheotomy.....	25-100
Trephining.....	25-100
Tumors, removal of.....	5-50
Uterus inverted, reduction.....	25-100
Uvula, excision of.....	5-50

Tradition hath it that once upon a time the Cuyahoga County

Medical Society, after due discussion, arranged and adopted a fee table, and went so far as to print it for distribution among its members, who agreed to conform to it, provided they could charge either more or less if they pleased. However, up to the present date, diligent research has failed to disclose documentary evidence of the truth of this story. Being, therefore, unable to present our readers with a copy of any fee table elaborated by a local representative body of the profession, we subjoin a table showing what fees are actually charged by a large proportion of the medical practitioners in Cleveland to-day. There are a small number in this city who charge a fair fee in the majority of cases—a fee for instance such as that of the New Jersey State Medical Society given above. These few perhaps may be inclined to regard our table as showing the case worse than it is. But those who know will recognize the truth of our assertion that the following is fully up to the average.

Office prescription.....	25—50 cents.
Visit when family physician.....	\$ 1
When first visit requires minute examination.....	1
Each hour of detention, if not more than an hour or two, not charged.	
Prescription to another member of the family—seldom charged at all, and always objected to showing that they have never been accustomed to it.	
Single visit when not family physician.....	\$ 1
First visit as consulting physician.....	3—5
Each subsequent visit as such.....	2
Consultation at night.....	3—5
Consultation by the attending physician—seldom charged as more than ordinary visit.	
Remaining all night, not obstetric.....	5
Rising at night and prescribing.....	.50
Surgical visits.....same as medical.	
Ordinary midwifery.....	3-5-10
Difficult midwifery.....	10—20
(We have one physician who <i>customarily</i> , when called to a forceps case by a midwife, charges \$2 for his services.)	
Mileage when above two miles.....seldom thought of.	
Advice, no prescription written.....	0
Advice when family physician, 0; also give a "sample bottle" gratis if you have it.	
Subsequent advice for same malady.....	0
Certificate of health—if anything.....	.50
Gonorrhœa—pay for each prescription at ordinary rates or guarantee cure for \$5.00.	

Syphilis.....	Pay for each prescription .25—1
Vaccination.....	.50
Dislocation elbow or shoulder—reduction and subsequent treatment.....	5—10
Fracture arm—reduction and subsequent dressings.....	5—12
Leg or thigh—reduction and subsequent dressings.....	10—20
For office advice in ordinary cases.....	.25—.50
For special examination.....	1
Letter of advice or written opinion.....	1—2
Administering anesthetics.....	1—3
Life insurance examination.....	.50—3
For attendance upon court per day.....	.75
Catheterization.....	1
Foreign bodies, eye, ear, nose, or throat.....	.25—1

The Berlin correspondent writes as follows to the *Medical Record* of July 16:

“It may be of interest to American physicians to know a few of the legal rates allowed German physicians and surgeons for their work. Remember that a mark is a quarter, or about twenty-three and one-half cents: Light natural labor, 6 to 15 marks; twin, 9 to 24 marks; natural but tedious labor, day and night, 12 to 15 marks; foot presentation, 12 to 30 marks; turning, 12 to 36 marks; forceps, 12 to 30 marks; craniotomy, 30 to 60 marks, Cæsarean section, living woman—child alive or not—30 to 60 marks; same, dead woman, 12 to 24 marks; removal of unripe ovule or mole, 3 to 12 marks; examination of pregnant woman, 1.50 to 6 marks; writing a full report of case, 1.50 to 3 marks.

Surgery: Trepanning, 24 to 36 marks; strabismus, operation on one eye, 24 to 45 marks; both eyes, one-half more; extirpation epithelioma of the lip, 12 to 24 marks; second operation, one-half as much; enucleation of the eye, 12 to 36 marks; harelip, 12 to 24 marks; excision of the tonsils, 9 to 18 marks; removal of nasal polypus, 18 to 30 marks; catheterization, men, 3 to 6 marks; women, 1.50 to 3 marks; foreign body in the œsophagus, 6 to 12 marks; tracheotomy, 18 to 36 marks; excision of the breast, 24 to 45 marks; paracentesis thoracis, 15 to 20 marks; circumcision, 6 to 12 marks; castration, 30 to 60 marks; cut for stone, 60 to 150 marks; amputation, upper arm and leg, 24 to 45 marks; reposition, dislocated arm, 9 to 18 marks; setting broken collar-bone, 9 to 18 marks; neck of femur, 12 to 24 marks;

blood-letting, 2 to 6 marks; assistant at operations, 3 to 9 marks; post-mortem, 6 to 12 marks.

Physicians' visits in the city: First two, 4 marks each; successive visit, with prescription, 1 to 2 marks. Patient one mile from city—first visit, 3 to 6 marks; each succeeding visit, 2 to 3 marks. Contagious fevers, charges doubled. Night-visits, first, 6 to 9 marks each; each following, 3 to 6 marks. Those between 10 P. M. and 6 A. M. are considered night-visits. Only two visits daily can be charged for; prescriptions in office, $\frac{1}{8}$ to $\frac{3}{4}$ mark. First consultation, 4.50 to 9 marks; each succeeding, 2.25 to 3 marks.

These fees, as may be readily seen, are very low; they are not followed closely, however but are the legal fees, and are the amounts which may be collected by law. They have been in force since 1815, but usually these rates are exceeded.

As a contrast to these small figures we may now view some large ones. As nearly as your correspondent could ascertain, Professor Schroeder enjoyed from his practice an income of 250,000 marks annually; Gueserow, 150,000 marks; Martin, 100,000 marks; while Waldeyer, from his teaching, realizes 25,000 marks yearly. Martin has been known to ask and receive 4,500 marks for an ovariectomy."

This foreign list, not being accompanied by the latest market quotations on schwartzbrod, wienerwurst, bier and other necessities, is difficult to compare with our own as to actual purchasing value of the fee. But we know that when it comes to buying instruments or dressings the German's mark will go almost as far as the American's dollar.

With the foregoing compare the following, taken from Third Edition Official Register of Physicians and Surgeons in the State of California, January 1, 1887.

FEE BILL ADOPTED BY THE SAN FRANCISCO COUNTY MEDICAL SOCIETY AND THE SOCIETY OF GERMAN PHYSICIANS, DECEMBER 9, 1884.

MEDICAL FEE BILL.	
For one Ordinary Visit....	\$5 00
For one Night Visit (from 10 A. M. to 7 P. M.).....	10 00
(For additional patients in the same family, extra charge.)	
For the First Consultation.....	\$.10 00 to 20 00

For each following Consultation.....			10 00
(Fees for consultation will be charged by the attending as well as the consulting Physician.)			
For Office Advice in ordinary cases.....	2 50	to	5 00
For special Examination.....			10 00
For ordinary Obstetrical Cases.....	25 00	to	50 00
(After the ninth day, visits will be charged at ordinary rates.)			
For Instrumental and Extraordinary Cases.....	50 00	to	300 00
For Vaccination.....	2 50	to	5 00
Detention, per hour.....	5 00	to	10 00
Letter of Advice or Written Opinion.....	5 00	to	25 00
For Examination, involving a question of law in a case in which the Physician may be subpoenaed to attend court.....			100 00
For attendance upon Court, per day.....	50 00	to	100 00
For Administering Anæsthetics.....	10 00	to	25 00
For Post-mortem Examinations.....			50 00
For Post-mortem Examinations, involving legal investigations, or in cases of contagious diseases.....	500 00	to	1000 00

SURGICAL FEE BILL.—FIRST CLASS.

Capital Operations, or Operations of Unusual Difficulty or Gravity.

Such as: 1. Amputation of Large Limbs; 2. Compound Fractures and Dislocations of Larger Bones; 3. Exsection and Resection of Large Joints and Bones; 4. Ligation of Large Arteries; 5. Removal of Large Tumors; 6. Transfusion of Blood; 7. Trephining of the Cranium; 8. Cleft Palate; 9. Operations for Cataract, Artificial Pupil and Enucleation of the Eye; 10. Tracheotomy; 11. Operation for Stone in the Bladder; 12. Strangulated Hernia; 13. Vesico-Vaginal and Vesico-Rectal Fistula; 14. Fistula of the Genital Organs; 15. Difficult Plastic Operations; 16. All operations involving Laparotomy, etc. Fee.....\$500 00

SECOND CLASS.

Operations of Secondary Importance.

Such as: 1. Simple Fractures and Dislocations of Smaller Bones; 2. Ligation of Arteries of Secondary Size; 3. Tapping and Injecting of Ovarian Cysts, and Radical Cure of Hydrocele; 4. Paracentesis of the Thorax; Removal of Breasts; 6. Hare-Lip; 7. Operations on Urethral Strictures; 8. Fistula in Ano, etc. Fee.....\$250 00

THIRD CLASS.

Minor Operations.

Such as: 1. Amputations of Fingers or Toes; 2. Excisions of Small Cysts or Tumors, not involving important organs; 3. Excision of Tonsils; 4. Nasal Polypi; 5. Tapping for Ascites; 6. Tenotomy; 7. Reducing Hernia by taxis, where Anæsthetics are administered, etc. Fee.....\$ 50 00

FOURTH CLASS.

Such as: 1. For reducing Fractures or Dislocations of Fingers or Toes; 2. Passing Setons; 3. Suturing Recent Wounds; 4. Opening ordinary Abscesses; 5. Catheterization; 6. Tapping for Hydrocele, etc. Fee.....\$ 20 00

The foregoing charges are for the performance of the operation only. For subsequent visits or office attendance, charges are to be made as in ordinary cases of disease, the fee being always in proportion to the time occupied and the trouble and responsibility incurred.

For operations and services not enumerated in the foregoing lists, charges will be made according to their nature and importance, at rates as nearly corresponding to the same as practicable.

While the Medical Profession recognizes the claims of charity upon its members, yet, inasmuch as the above list of charges is founded upon a just consideration of the services performed, it will be considered a duty on the part of the profession to conform thereto whenever the circumstances of the patient do not clearly forbid it.

All bills are considered due and payable immediately after the services are rendered.

This Fee Bill is not intended to apply to the practice of Specialists, nor in cases of extraordinary services.

This table indicates somewhere near the true value of the professional services rendered, and the sooner physicians appreciate the value of their services and charge accordingly the more highly will they be respected. If the physician values his time and skill for writing a prescription at twenty-five cents he cannot expect his patient to value it more highly. Although it is not unusual for them to do so, especially when coming from other cities, by paying the physician more than he charges. It is true it is somewhat difficult for a young man to charge three, five or ten dollars for services that the oldest practitioners or surgeons in the city will do for fifty cents, but it pays better to see one patient and charge three dollars than to see three and charge fifty cents apiece. It may be urged that patients are not all able to pay these fees, but this is largely a matter of education. These same patients that talk about being poor when consulting a doctor, think nothing of paying a dollar or two for a patent medicine, or one or two hundred dollars to a "catarrh specialist" or "faith cure." They smoke expensive cigars, drink lager beer, patronize the theatres, send their families to the sea-shore, and do a thousand things that cost them ten times as much and do not think twice about the cost.

Of course if you have a few stock prescriptions and prescribe for your patients in a routine manner, and expend no more thought or skill in prescribing for your patients than the clerk in making out his check for the goods he has sold you, you deserve a clerk's pay. But if you give your patients your best time and consideration, study your cases thoroughly, and do good work, your patients will not object to paying for it.

We have introduced these fee-bills not with the idea that anyone would be obliged to charge the fees here indicated, as everyone ought to be able to estimate the value of his own services, but it is of great value to the younger physician sometimes to know what the usual charge is in certain cases. And we believe they usually err upon the side of charging too little, and thus establish a precedent that is often troublesome to overcome.

Fee-bills when adopted by medical societies as a rule we believe have been beneficial, as they have raised the standard of fees, although they have often been of great disadvantage to a few of the most conscientious members of the profession who have attempted to live up to the spirit as well as the letter of the bill, and this fact has been taken advantage of by the unscrupulous members of the profession to further their own selfish ends.

MEDICAL REGISTRATION IN OHIO.

WE hope the profession will consider well Dr. Jones' article on medical legislation. It will be seen that if we had a medical registration law we would have a law regulating the practice of medicine, not as good as might be desired, but "half a loaf is better than no bread." With this law we could do much to prevent our state being flooded with all the medical rubbish from other states. No matter what law is to be enacted we can do nothing until we have a medical registration law, and if the profession demands it there will be no trouble in securing the passage of Dr. Jones' registration bill. As an illustration of the necessity of such a law we will mention the case of a young man in Stark county who is said to be doing a large practice.

He commenced studying medicine at his home in Pennsylvania last August. He went to New York, matriculated and stayed until the faculty insisted on his taking out his tickets. He then came to Ohio, and commenced the practice of medi-

cine last winter. In a recent letter he says he is doing well and would do much better if there were not a couple of quacks in town!!

This is a sample of the physicians who are coming into our state, and crowding out qualified practitioners. We could give names and dates of cases similar to the above, but so long as we have no registration law the exposure of a few of these cases would do no good.

When the registration bill was pending before the Pennsylvania legislature we were very much surprised at the strenuous objections urged against the bill by many practitioners, some of them old members of the profession. But when the act went into force the secret of their objection became evident. Many were practicing on Buchanan's diplomas. Others who had been sailing along for years upon the supposed merits of graduating at some foreign university, came up and registered upon the "ten year's practice" proviso. It is true this was somewhat humiliating to some of them, but the profession as a whole gained by it. Since our experience in Pennsylvania we always feel very suspicious of the gentlemen who object to a medical registration law.

By a vote of the Ohio State Medical Society, copies of Dr. Jones' article are to be distributed at the expense of the society, and we hope every regular graduate in the state will constitute himself a committee of one to urge upon his representative in the state legislature the importance of passing a medical registration law at the earliest possible moment.

The people of this great state owe it to themselves to enact some measures regulating the practice of medicine within their borders. Pennsylvania on the east has a registration law and is sending her Delamater Smiths almost every week to our fair city to ply their nefarious work of destroying the yet unborn. Would to God they might all meet their just deserts as promptly as he; West Virginia on the south is driving her surplus of ignorant charlatans across the Ohio river into our state; Illinois and Michigan on the west are sending us cancer doctors, faith curers, tooth pullers, Indian doctors and all their ilk. So that at the present time these

states have one doctor to every seven or eight hundred persons, while Ohio has one doctor, such as they are, to every five hundred or less, and will soon be as bad off as poor Maryland with her total absence of medical legislation and one "doctor" to every three hundred and fifty inhabitants.

COMMENCEMENT OF THE WOOSTER UNIVERSITY MEDICAL DEPARTMENT.

EXERCISES HELD WEDNESDAY EVENING, JULY 27, IN THE CHURCH
OF THE UNITY, CLEVELAND.

THE twenty-eighth commencement exercises of the medical department of the University of Wooster were held in the Church of the Unity, Wednesday evening, July 27. The pulpit platform was occupied by trustees, the members of the faculty and the speakers.

At 8 P. M. the exercises began with Raymond's overture by the Germania orchestra, after which the Rev. Dr. Eliott of Rittman, one of the trustees of the university, offered prayer. The most remarkable feature about the commencement was the absence of the conventional commencement day floral decorations.

Dr. F. J. Weed, dean of the faculty and president of the evening, introduced Dr. J. M. Sattler as valedictorian, an abstract of whose address is as follows:

"It affords me great pleasure to have the privilege of delivering the valedictory address, and I hope that our too brief acquaintance will lead to love that will be pleasant after we have scattered through all the states of this great republic." The speaker referred to the Egyptians, who were supposed to be the first medical writers; "but," said he, "the medical profession is indebted more to Greece than to any other country, at one time the birthplace and home of the greatest scientists and heroes the world has ever known." The speaker quoted Plato, spoke of the Hindoos, who believed that the body is composed of 100,000 parts. "The Chinese," said

he, "were the first to speak of the circulation of the blood in a vague manner. They claimed that the blood began to circulate in the lungs at 3 A. M. and terminated in the liver twenty-four hours thereafter." The speaker referred briefly to the progress of medicine from the second to the fourteenth centuries, when the human body was first dissected. In the fifteenth century regular schools were established in England, France, Germany and Italy. In the seventeenth century Harvey immortalized himself by the discovery of the circulation of the blood, then followed John Hunter and Edward Jenner, the latter of whom through the discovery of vaccination saved millions from one of the most loathsome and terrible diseases. The speaker then referred to some of the great medical men of the nineteenth century.

He then addressed the faculty and eulogized the late Dr. A. C. Miller, whose death was a severe blow to the institution. "We shall soon become co-laborers with you, and if we are true to ourselves perhaps we shall be as successful as the majority." The speaker closed by addressing his classmates, saying: "Many have been the days we have spent together. The long-looked-for examination came and eighteen of us knocked for admission; after five days we conquered, and after shouting victory the curtain will drop to-night. May our motto be onward, and let us remember that the path of glory leads but to the grave, while the path of duty leads to greatness."

Following "Mikado" by the orchestra, Dr. Weed expressed himself as gratified that for the first time in many years all the candidates who had appealed for degrees succeeded in getting them.

Rev. Dr. S. F. Scovel, president of Wooster university, presented the diplomas, with a brief address: "When you shall open this cabalistic looking roll, so neatly tied with a silk ribbon, you will come to a sheepskin, which we call a diploma. Upon it are written certain words which make it more than an ordinary piece of parchment. It gives you certain rights, privileges and honors, and how glad am I to echo the sentiments of your dean, for it is not an idle

thing to say, that an institution endowed by the state will permit you to wear a title which gives you an ideal standing wherever you go. But remember, gentlemen and ladies, that we present you these diplomas on condition; you must carry with them not only knowledge but character. Humanity is another condition. You are to be the noblest representatives of humanity. Do not be mere gold hunters. The pivot of your whole lives is a determination to study more and know more. The physician does not deserve his name if he is too selfish to spend a life in study. The necessity for study will be constantly pressed upon you by the progress of science. Let me tell you that you have many obstacles in the way of your progress. To be but money makers rather than relievers of mankind would be the worst reproach. The physician does not deserve the name who will not study further the science into which he enters. Prosecute your studies in other languages, in other lands. Comprehend what your possibilities are, think of the hindrances, remember there is no sleep for the physician beyond what is necessary. The physician is also in danger of trying to get rich too fast. Beware of money, young gentlemen, it is the foe of the age. You have too much to do to make money. Where you cannot make it save in the interest of your profession, let it go. Be noble in your ambition to know everything there is to be known, and if you do that it will keep you busy night and day."

After an earnest benediction Dr. Scovel handed the diplomas to the following graduates: Alvin J. Kern, Slatington, Pa.; W. S. Putnam, Gann, O.; F. Palmer, Littleton, W. Va.; G. W. Crile, Chili; W. E. Thompson, Lloydsville; Alonzo D. Husted, Pittsburgh, Pa.; James A. Shaefer, Canton; L. L. Gillett, Turners, N. Y.; M. W. Baird, Davis, Pa.; J. W. Sattler, Ashland; A. Peskind, Russia; A. H. Van Cleve, Cleveland; A. J. McKillop, Wallacetown, Ontario; J. P. Strouse, Kilbuck; J. F. Fox, New Philadelphia; Mrs. Fannie E. Goodsell, Cleveland; J. D. Lewer, Bakersville; J. J. Erwin, Youngstown; P. E. Shuman, Glover's Gap, W. Va.

Dr. Scovel then took occasion to eulogize the late Dr. A. C. Miller, spoke of the feeling of friendship entertained by the faculty and trustees toward him, and said that in their behalf he desired to express the warmest sympathy for the bereaved friends and family.

Following the Treasure Waltz from "Gypsy Baron" Rev. Dr. S. P. Sprecher of the Euclid avenue Presbyterian church delivered the annual address on the "Spirit of Science," in which he said: "I am to speak to you this evening of the characteristics of the true scientific spirit—the spirit of investigation—the spirit which searches after the principles of things—after the law which governs phenomena—the spirit which analyzes everything and proves all things, and seeks to know the real nature of everything that lies within the reach of investigation—the thirst for knowledge—the spirit which hungers and thirsts for knowledge in the realm of nature, as a Christian may hunger and thirst after righteousness. It is the spirit of enthusiastic devotion to the pursuit of truth. It seeks to clear away error and misconception; to arrive at accurate knowledge; to remove the obstacles which lie in the path of human progress; and to advance the race toward the goal of its ultimate perfection. There is nothing in human nature more sublime than the enthusiasm of this spirit of science. Impelled by it, men have sacrificed their lives to give to the world new facts and truths. Sir John Franklin perished amid the ice fields of the north, searching for the Polar Sea. Dr. Livingstone died in the wilds of Africa in search of the sources of the Nile. Stanley, even now, perhaps, is giving his life in the effort to open up the same dark continent to commerce. These men are examples which make us proud of the nature we bear. The medical profession affords many noble illustrations of this spirit. Such a spirit is the condition of success in any profession, and without it all the terms, names or formulas which you can cram into a student's mind will not educate him. Many men make the mistake of their lives in entering professions in which they feel no enthusiasm. No man can accomplish anything when the principles, truths and facts with which he deals do not

kindle a flaming interest in his soul. The spirit of science seeks the exact truth. It wants neither over-statement nor under-statement. It desires to know not what will favor a pet theory or fall in with preconceived notions, but what is exactly true; no more, no less. A man of true scientific spirit will never present speculations as though they were ascertained truths of science.

For this reason there is between the spirit of religion and science no present conflict; for there is no fact of settled science which is in conflict with religion or antagonistic to the gospel of Jesus Christ. There are bigoted theologians who are quick to denounce every statement of science that does not conform to their old formulas. Such men are not concerned for the truth, but are only little Demetriuses. Bigoted theologians and partisan scientists are making all the trouble now between science and religion." Dr. Sprecher spoke of the telephone and other modern inventions which would have been looked upon as miracles in the early years, and in closing he said: "Even the fury of the tempest is in many directions almost defied by the inventions and appliances of our Signal Service. We shall yet tame the tornado and the cyclone, and what wonderful things we hear of now respecting the germs of disease—minute organisms which are the leaven of disease and decay. We are on the eve of grander discoveries than any that have gone before. Science will yet shut up in a Pandora's box all the ills to which our flesh is heir, and then the doctor's occupation will be gone. God grant that this may be soon—but not too soon—while you live, young gentlemen."

FEEES TO MEDICAL WITNESSES.

The question of medical fees not only interests the profession in the United States but in England as well, as the following extract from *The Provincial Medical Journal* will show:

"Medical men have reason to complain of the fees paid them for evidence. The Wigan Medical Society, we are

pleased to see, have taken up the question, and we trust the society will be supported by the profession. A case has recently occurred in America, which may possibly help to settle the question. Dr. F. H. Darby, of Morrow, O., was summoned by the state as an expert in a murder case. He refused to answer the following question unless paid a fee as an expert: 'State whether in wounds like this there would be immediate gaping, or would the lips of the wound for a time remain in contact or nearly so?' The judge declined to grant the fee asked, because he held that there was no law for it, and Dr. Darby, for his refusal to reply, was sent to gaol for contempt of court, and he was only released, after several days' confinement, on his own recognizance. We understand his case will be made a test one. Dr. Darby based his refusal on the ground that he was asked to give expert testimony, and, as it was not claimed that he had any personal knowledge of the case, the issue was a square one. In some similar cases which have been decided in other states, the physician was a witness as to facts, and refused to answer when questioned as to matters of opinion. In several such cases the court has not sustained the physician, refusing to discriminate between a pure question of fact and an incidental one of theory. The precedent set by the states, if Dr. Darby's contention be established, will form a *point d'appui* for the profession on this side."

New Books and Pamphlets.

TEXT-BOOK ON SURGERY, GENERAL, OPERATIVE AND MECHANICAL. By John A. Wyeth, A. M., M. D., Professor of Surgery in the New York Polyclinic, &c. New York : D. Appleton & Co., 1887. Sold by subscription only.

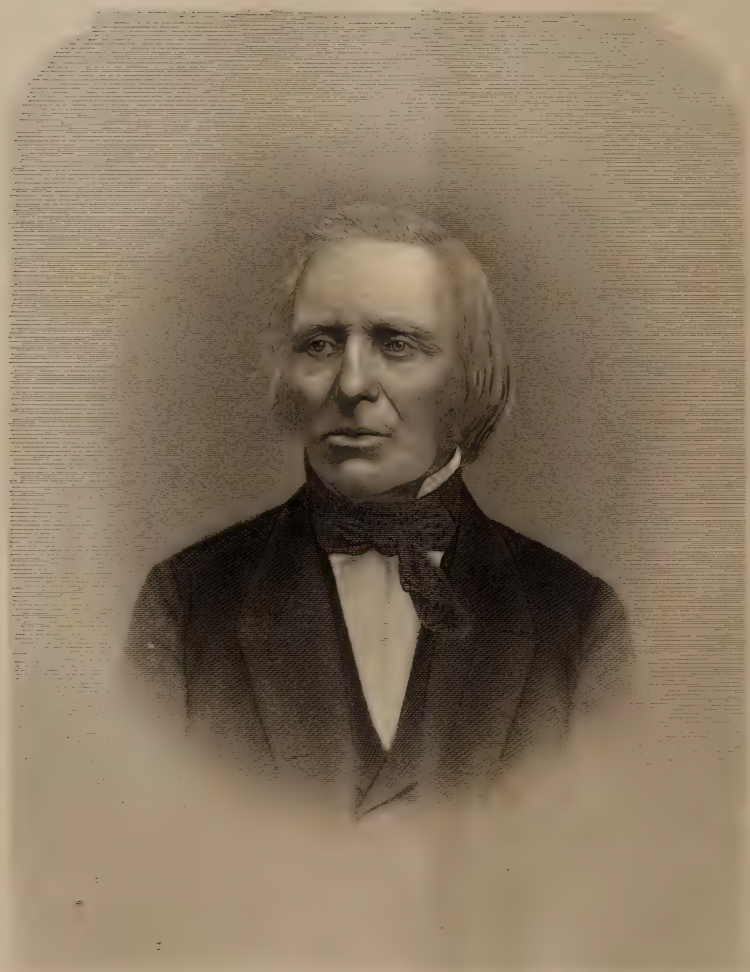
When the Messrs. Appleton & Co. announced to the medical world that they had in course of preparation a text-book on surgery by Dr. Wyeth we looked forward impatiently for the appearance of the work, believing that it would mark an epoch in the annals of surgical literature. We formed this opinion not alone from our knowledge of the great abilities of the author ; the fact that each and every previous publication of this firm had been the peers of works published by other houses was an assurance of continued excellence.

Dr. Wyeth's "Text Book on Surgery" (general, operative and mechanical), a single imperial octavo volume, has concentrated into its seven hundred and seventy-seven pages the latest views in the pathology, diagnosis and treatment of the subjects considered, leaving nothing to be desired by the student, general practitioner or experienced operator. Chapters I and II should be read and re-read by all junior practitioners—they are the most valuable that have ever been written—and it might be well for examining boards to insist that all candidates for graduation shall commit to memory these preliminary pages. The remaining chapters are of equal merit.

A feature of the greatest value is the magnificent illustrations, seven hundred and seventy-one in number, with which the volume is embellished. Fifty of these are colored, the principal operations being illustrated by tracings from sections of the frozen subject. In the section on ligation of the arteries, these give at a glance the relation of the vessels to the surrounding parts.

In concluding our brief review of this great work on surgery, we may be permitted to add that in our opinion no treatise hitherto published is comparable with Dr. Wyeth's book, and far into the future must it continue to be the work *par excellence* on the subject.

I. C. C.



John Delamater

— THE —

Cleveland Medical Gazette.

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No. 10.

ORIGINAL ARTICLES.

ETIOLOGY OF TUBERCULOSIS.

BY D. N. KINSMAN, A. M., M. D., PROFESSOR PRACTICE OF
MEDICINE, COLUMBUS MEDICAL COLLEGE, COLUMBUS, O.

WHEN the history of medicine shall have been written, the conquests of this decade in the realm of the "infinitely small" will not be the least of the recorded victories.

These discoveries are full of promise for the future, for they substitute fact for conjecture and give a rational basis, both for prophylaxis and therapeutics.

It is true nothing has yet been discovered in therapeutics which is specially valuable, but what must be done as prophylaxis is very clear.

The discovery of the bacillus of tuberculosis by Koch has made us acquainted with a new factor in etiology, and grouped in a single class diseases before supposed to be diverse. This discovery has not destroyed or rendered useless anything which was known before. By it our horizon has been enlarged and our knowledge of relations increased, and thus a distinct advance has been made.

In pathology there is need and room for all which is true,

even if it is new, as well as for that which has been tried and found true. Error is no less error because it is gray-headed; nor the new less true because new.

It seems as if the minds of some men were cast in plaster of Paris, and they live and die, singing in medicine as in their theology, "As it was in the beginning so it is now and shall be, world without end."

It is the fashion to call this conservatism in medicine, it is called bigotry in theology. Both are alike unscientific, and would block the wheels of human progress.

There is a class of neoplasms known as *granulomata*. They are all infectious. Each one of the class is characterized by a special micro-organism. In this class we place tubercle, syphilis, lupus, leprosy and glanders. It is probable that tubercle and lupus are caused by the action of the same bacillus, modified by locality. There is now no question of the infectiousness of all these diseases, although less than a score of years ago this was denied in respect to all except syphilis and leprosy.

All these diseases are communicable from man to animals, and in a portion, at least, from animals to men. At a certain stage the inflammatory process is arrested, and retrograde metamorphosis takes place.

Tuberculosis causes one-seventh of the annual mortality in civilized nations, and invades every organ in the body. Most of this fatality depends upon tuberculosis of the lungs. Therein its process is most readily recognized; elsewhere, as in the brain, its localization leads speedily to death.

Is Koch's bacillus the cause of these manifold appearances of tuberculosis? Three principal objections have been urged against this:

1. In a few cases careful examination has failed to reveal the bacillus in those lesions which were manifestly tuberculous.
2. Indifferent substances, such as lycopodium seeds and irritants, as emulsions of croton oil when introduced into the circulation, produce tubercles.
3. Under the theory that the bacillus causes tuberculosis,

it is insisted a suitable soil is necessary for its fructification, and we cannot tell which is the most important in this process, the seed or the soil, and whether after all the bacillus is not a concomitant instead of the cause of tuberculosis. We shall consider these objections in their order.

Are a few negative cases to outweigh thousands of positive observations?

Malassez and Vignal have shown that there is in the life of Koch's bacillus a spore form, which does not react to the ordinary aniline staining. This spore form they have found in tubercles in which the bacillus was not found. These spores will develop into a bacillus. The spores injected into animals will produce tuberculosis, and they say the tubercular manifestations are more prompt upon inoculations with the spores than with the bacilli. In our opinion, these observations are a sufficient answer to the first objection.

The statement in the second objection is granted to be true, *i. e.*, injections made of indifferent substances produce growths, apparently tubercles. These growths are not the result of tuberculosis, but constitute the condition known to-day as pseudo-tuberculosis.

These growths lack the essentials of true tubercles. First, they do not contain bacilli or their spores.

Second, these pseudo-tubercles cannot be inoculated in a series from animal to animal. This disposes of the second objection, for the essential feature of a tuberculous growth is its infectivity, no matter what its form or its course may be.

Tubercle is like vaccinia or variola. Inoculation takes certainly and uniformly, and its action may be extended in an indefinite series when the soil is favorable. This brings me to the consideration of the third objection.

With us it is not a question of seed *or* soil, but of seed *and* soil. We grant to the fullest extent the influence of diathesis, of telluric and atmospheric causes, and of malnutrition, in fitting the soil for the development of the tubercular seed sown thereon. We know, moreover, there are certain soils which resist for a long time the implantation of tubercles. What we do assert is, that the tubercular bacillus is the

necessary somewhat to be implanted on the soil, or tubercles will not arise, nor is tuberculosis peculiar in its behavior in this.

Smallpox and vaccinia are unquestionably infectious diseases, and no one will claim to-day that they arise *de novo* on any soil, however well prepared, unless the special germ of the diseases is planted therein.

The soil may be so modified that smallpox or vaccinia will no longer grow thereon. I know three persons who have always resisted the action of vaccine virus, and who, after repeated and prolonged exposures to smallpox, failed to take it.

We know that the human organism may be so modified after tubercular infection that its spread is resisted by encapsulating the diseased masses. We know the constitution which offers a favorable soil may be so modified as to offer a lifelong resistance to the implantation of tuberculosis. Are there those who have an original and complete immunity from tuberculosis?

It has been urged, *i. e.*, that "coagulation necrosis" precedes the lodgment of the bacillus. Those who rely upon Zeigler for proof of this should quote what Zeigler has written since Koch made his discovery. Furthermore, it is the opinion of authorities to-day that the bacillus tuberculosis is the sole cause of caseous degeneration.

Tuberculosis is an inoculable disease. Its inoculability does not depend upon the tubercle which has undergone coagulation necrosis—for pure cultures of the bacillus introduced into the eyes of rabbits produce, first, tubercles of the iris and finally general infection. This statement has been so often confirmed by competent operators that there can no longer be any question on this subject. Tuberculosis has been communicated experimentally by the ingestion of tuberculous matter.

Tuberculosis has been communicated experimentally by causing animals to inhale tuberculous matter in fine division.

In what other way than by inoculation with or the inhalation or ingestion of the germs of any contagious dis-

ease does infection ever take place? The bacilli are expectorated from the lungs and discharged from the bowels. They pass from the kidneys with the urine and fall from the surface of tuberculous ulcers wherever located. While these organisms reproduce only at the heat of the human body, they are very tenacious of life and no ordinary heat or cold kills them. They fall upon the soil. They adhere to clothing and every object with which they come in contact. They thus produce an environment for every patient which is competent to act upon all who enter this infected circle.

Tuberculosis in men and animals is the same. Cows feeding in the stalls, where tuberculous cows have fed before them, become tuberculous.

Prisons and barracks produce their yearly harvest of tuberculous cases. In some instances it becomes epidemic, attacking in a series all who come there to live; and the fresh recruits from the country seem to suffer the most. Those who should resist the longest are often soonest attacked. The soldiers who are lodged in the barracks of the Royal Union suffer more from tuberculosis than those who were exposed to the winter storms in the trenches at the siege of Sebastopol. Soldiers exposed to vigils, labors, attacks, exposure, marches, furnish but a fraction of as many cases of tuberculosis as those housed in the best barracks in England. We are convinced that we have seen cases of undoubted contagion, from one member of a family to others. The cases reported by Reich, Weber, Musgrave, Clay, Jacoud and others cannot be easily explained otherwise than by the assumption of direct contagion.

Tuberculosis is a disease of continuous propagation, just as typhoid fever is. Within the memory of living men it has been introduced among the natives of the South Sea Islands, where the disease was unknown until the ships of the northern nations touched their shores.

The landing of the Anglo-Saxons there was, to the natives, like the apple of Eden to our first parents. It gave them a

knowledge of the good and evil of civilization—and of its penalty, death, by tuberculosis.

The recognition of the bacillus has become the most satisfactory means of diagnosis of the tubercular process; and it is possible long before changes occur in the lungs, which give rise to definite physical signs, to say a patient is stricken with tuberculosis.

Tuberculosis of the kidney or bladder can no longer escape recognition until the *post-mortem*, when the physician examines his case as he ought to.

We think these conclusions are warranted by our present knowledge upon this subject.

1. The bacillus tuberculosis is the active agent in the production of the disease—because it has been shown the bacillus or its spore is always present in tubercular disease.

2. The disease is infectious, and may be communicated by inoculation, ingestion and inhalation of the bacillus.

3. By assuming the above propositions, we by no means exclude the preparatory influence of depraved nutrition from any cause whatever.

4. Pure cultures of the bacillus tuberculosis produce tuberculosis and nothing else.

5. There is evidence that tuberculosis is a disease of continuous propagation.

6. There is evidence that tuberculosis is transmitted at times in the same way as other diseases denominated contagious.

7. The recognition of the bacillus leaves no doubt as to the diagnosis.

8. All tuberculous products from the lungs, bladder, bowels, or ulcerations, whatever the location, should be disinfected by exposure to boiling water, or other equally destructive agent.

DIAGNOSIS OF BRONCHO-PNEUMONIA IN CHILDREN.*

BY D. S. HANSON, M. D., CLEVELAND, OHIO.

THE subject for discussion to-day is broncho-pneumonia in children, as already stated. It is a disease that should be especially sought for in all acute lung diseases that are not readily made out, for when neglected it tends to run into or produce that most dread disease, phthisis pulmonalis, and we hardly need repeat that a disease that is so far reaching and fatal in its sequelæ should be properly diagnosed and treated while in its acute form.

In making a diagnosis we have a disease in which there is present, distress, cough, rapid pulse, elevation of temperature and rapid and difficult respiration, the prominence of the signs and symptoms corresponding in the severity of the disease very closely. The fever being of a remittent type, very generally and often marked nervous symptoms develop in severe or improperly treated cases; enteric complications very often accompany and modify the disease. Authorities seem to agree in the statement that when children are more than three to three and a half years of age the disease runs a course so much like that in the adult, that it need not be especially considered in this connection.

The diseases which may be confounded with it and which can only be diagnosed from it by a careful examination of both signs and symptoms are the following: Acute bronchitis, pulmonary collapse, croupous pneumonia, pleuritis, acute tuberculosis and malarial fevers when accompanied by bronchitis.

(1) Acute bronchitis of the smaller tubes always precedes and accompanies an attack of broncho-pneumonia; the development of the latter during the course of a bronchitis is noted by the development usually of some very marked symptoms. The most prominent are, increased pulse rate, more rapid and difficult respiration and a marked increased

*Remarks made by Dr. Hanson on the discussion of this subject in the Cuyahoga County Medical Society, March, 1888.

temperature, some authors fixing 103 degrees Fahrenheit as the highest in an uncomplicated bronchitis. The course of the fever is a most useful help in the diagnosis, for in the broncho-pneumonia it has distinct morning remissions, the variation often being three degrees or even more. By a careful physical examination, patches of dullness can often be found unless the consolidation is centrally located and not extensive in amount. Even when the areas of consolidation are central, by auscultating in the axilla, the subcrepitant rale can be heard during a deep respiration, best heard after cough.

(2) Pulmonary collapse occurring during acute bronchitis: often very closely resembles broncho-pneumonia. It, however, more frequently occurs in the very young or feeble children; is not accompanied with rise of temperature, although the rapid pulse, distress and dyspnœa may be present. Where extensive areas at base of chest are involved, the retraction of the upper part of abdomen during inspiration is very much more marked than in broncho-pneumonia; the areas of dullness are much more transient than in the latter, often changing places or entirely disappearing in twelve to twenty-four hours; the dullness is not so well marked and complete as in pneumonia. Vocal resonance and fremitus are diminished in collapse, and rales are feeble or wanting, while the opposite holds good in pneumonia (broncho). When the collapsed lobule does not clear up in three or four days, it may reasonably be expected that it is complicated with inflammation, and usually an elevated temperature will warn us that this is the condition present. Where the collapsed portions of lung are small, and the condition is not very carefully sought for, its existence may not be known until this pneumonic complication is developed, and no doubt this is very often the true condition of affairs in these cases. In conclusion I again wish to refer to the range of temperature, which is the most available and reliable of any one symptom. In collapse it is very little or not at all elevated, while in broncho-pneumonia there is the sudden elevation to usually 103, degrees or above, with a distinct morning remission.

(3) Croupous-pneumonia may very closely resemble the condition under consideration, especially if the case is not seen until the disease is well developed and only a portion of the lung is involved. Yet, in the croupous form, the area of consolidation more nearly approaches the form of an entire lobe of lung, and the dullness is more marked and uniform. Bronchial respiration, bronchophony and exaggerated vocal fremitus are more marked in the latter, and the subcrepitant rale is not present during a deep inspiration, as it is in broncho-pneumonia. The character of the cough and the color and the consistency of the sputa, although not of as much aid as in the adult, yet will be of some use in making the diagnosis. The typical temperature range of catarrhal pneumonia should not be lost sight of, for it will be of nearly as much value here as in diagnosing the latter from collapse. When the patches of consolidation are scattered through both lungs, is accompanied with and has been preceded by bronchitis, with the typical variation of temperature, of course broncho could hardly be mistaken for croupous-pneumonia.

(4) Pleuritis, when of the usual form, with serous exudation, with displacement of heart, could easily be distinguished from a pneumonia; but, when of the plastic form, with little exudate, and accompanied by collapse of lung lobules, the diagnosis might be very difficult, the physical signs being almost negative, the temperature being the most valuable guide to a conclusion. When a plastic pleuritis complicates broncho-pneumonia, it would be extremely difficult to diagnose, but fortunately in children the two last named conditions are extremely rare. The latter could reasonably be suspected to exist if the case was unreasonably prolonged and tubercle could be excluded.

(5) Acute pulmonary tuberculosis, with tubercle deposits in the meninges, may, and often does, present a condition that would greatly puzzle the most experienced and acute observer to diagnose from broncho-pneumonia, especially if the latter was not seen until nervous symptoms were developed. The main points to be observed are, the history of the case, tubercle often showing an hereditary tubercular

tendency or a scrofulitic history, debility and a continuous fever for some time before pulmonary symptoms are developed, and even then, unlike broncho-pneumonia, the lung disease is not in proportion to the dyspnoea and fever. Diffuse bronchitis, with high temperature, where no consolidation can be found, looks suspiciously like tuberculosis, and, when *continuous* with the history above mentioned, if very favorable to the diagnosis of phthisis (acute), and excludes broncho-pneumonia, constipation usually accompanies tubercle, while it rarely exists, and even diarrhoea is often present, in broncho-pneumonia—pulmonary collapse is more common in the latter. An ophthalmoscopic examination and a microscopic examination of the sputa for tubercle bacilli and the elastic fiber make the diagnosis certain; but, as the latter means are not always available, the most useful points are, first, and most valuable, the continuous high temperature before pulmonary symptoms develop in tubercle, together with conditions above referred to, make the diagnosis reasonably sure. The progressive character of tubercle, its not being benefited by treatment, is also of some aid when the case is under observation for some time.

(6) That disease called malaria, a disease at all times convenient to the doctor and satisfactory to the patient, has many times been mistaken for broncho-pneumonia, and, when of the remittent character, with daily exacerbations and accompanied by bronchitis, it very much resembles the latter; but, of course, a careful physical examination when practicable will reveal the true condition. When the child is unmanageable the anti-malarial treatment will settle the question.

The diagnosis of chronic broncho-pneumonia from chronic phthisis is often involved in the greatest difficulty. In the former we often have continuous irregular fever, hectic night sweats, emaciation, the areas of altered resonance and percussion sounds, moist rales and perhaps a dilated bronchus, which simulates a cavity in lung, and in some cases the sputa is purulent and profuse, which, taken together, so closely resembles tuberculosis that the aid of the microscope must be

called in to settle the diagnosis. Even then, with improper management, the disease is especially liable to assume more and more of the phthisical character until true tubercle is at last developed.

In conclusion we wish to say that we have only said what others have often said and written before us. Yet, in so common a disease, the reviewing of what has long been known is far from wasting time; in fact, may be much more useful than too great research for the new at the expense of the old. The character of the disease points to a specific cause, and, if such cause exists, whether it be a vegetable parasite or some poisonous animal ferment, we would be glad to see some M. D. say a case *was broncho-pneumonia* and be able to demonstrate his diagnosis by his microscope or otherwise, so there would be no question of the character of the disease.

CORRESPONDENCE.

KENTUCKY STATE MEDICAL SOCIETY.

This society met at Crab Orchard Springs, Lincoln county, Kentucky, in its thirty-third annual session, July 11, 12, 13, with the president, Dr. J. G. Brooks, in the chair, and the secretary, Dr. Steel Bailey, at the desk. The president's address dealt of the relations of the doctor to various others; for instance, first, his relation to his patient, compared with which he thought no other relation was half so delicate nor half so intricate. He dwelt on the wisdom and forethought of our predecessors in formulating the code of ethics. He then reviewed the ways in which so many managed to circumvent the code where it referred to advertising by managing directly or indirectly to get their names in the daily press, taking up and running every new remedy or mode of treatment and getting interviewed on their treatments and operations. The advertising charlatan may consider himself honest, at least besides these men, for the public can, if they

will, estimate him at his worth. The ethics which should govern the specialist and the general practitioner are often broken. How many specialists abuse the confidence reposed in them to win away the patients of the physician to whom he should be an aid and a consultant. When a patient is sent to him with some trouble with which the general practitioner is unable to cope, it becomes his duty to treat that trouble and nothing more. The relations which should exist between the doctor and the druggist are plain. The doctor should prescribe the medicine and the druggist should compound it. This should be definitely lived up to by both parties. The physician should adopt the rule to prescribe no manufacturer's medicine at all. We are induced to recommend pills, elixirs, etc., where the exact formula is published because of the inelegance of preparation; but to me they seem like unto ready-made clothing compared to that made to order. They may fit, but most likely they will not. Prescriptions should be put up by competent hands, and a drug store should be a prescription store alone. Then the rent would be small and poor, sick people would not have to pay for marble and corners. He condemned, in the strongest terms, the practice of physicians giving laudatory recommendations to propriety medicines, for there will always lurk the suspicion that the doctor sold his name for dollars. We sometimes find the preacher and doctor combined, and the result is generally a bigot in divinity and a quack in medicine. We often find the minister volunteering gratuitous advice in medicine, which is neither to the advantage of the physician or the patient. In reviewing the field of medical ethics, I more than ever feel the true value and wisdom of the code, and my reflection convinces me that he who flavors his daily life with the essence of this code will surely not only be a better physician but also a truer, nobler and more divine man.

Quite an exciting time was had in electing officers. The report of the nominating committee was rejected and they were referred back to their room to report again. They reported the same names. This time the report was adopted by a very small majority. This caused much bad blood,

some bitter speeches and several resignations. It was all the result of an old feud and college fight. The officers reported and elected were the following:

President, L. S. McMurtry of Danville; first vice-president, William Bailey of Louisville; second vice-president, B. W. Stone of Hopkinsville; permanent secretary, Steel Bailey of Stanford; assistant secretary, S. M. Letcher of Richmond; treasurer, John C. Cecil of Louisville; librarian, T. B. Greenly of West Point; chairman committee of arrangements, Dr. J. M. Foster of Richmond. The next place of meeting is Richmond, on the second Wednesday in May.

E. S. M.

TAIT VS. BATTEY.

To the Editors of the CLEVELAND MEDICAL GAZETTE:

MY DEAR SIRs: At the meeting of the American Medical association in Cincinnati, O., Dr. Battey made some strictures on Mr. Lawson Tait, using my paper, "A Plea for Early Operative Interference in Cases of Obscure Pelvic Pain and Recurrent Attacks of Pelvic Inflammation in Women," as a pretext. In that paper I accredited Mr. Tait with having inaugurated the operation of extirpation of the uterine appendages for the cure of inflammatory diseases of those organs. To this claim Dr. Battey took exception, and in a lengthy speech, which abounded in invectives, he charged Mr. Tait and his disciples with having made claim which the facts of history did not justify. The important facts alleged by Dr. Battey were that Mr. Tait had claimed credit for having operated upon a case which died from the operation, but which Mr. Tait found convenient to resurrect for exhibition purposes a number of years later, and the priority of the operation of the removal of the uterine appendages. Apropos of this charge of Tait's dishonesty, Mr. Tait makes the following reply, which was published in the *Cincinnati Lancet-Clinic* of June 23:

TAIT'S REPLY.

BIRMINGHAM, ENG., June 8, 1888.

To the Editor of the Lancet-Clinic :

SIR: I observe that, on page 658 of your current volume, you report a speech by Dr. Battey criticising a paper of Dr. Rufus B. Hall. Dr. Battey alludes to me in a way so completely mistaken that I must ask your permission to make a correction.

Speaking of me, Dr. Battey says:

"Tait stated that he made some statement to Chadwick of Boston, that he made the operation one month before the obscure country doctor in Georgia, a statement which the gentleman from Boston does not exactly remember. When asked why this case was not to be found in his tabulated statements, he replied that it was a clerical error—a clerical error buried in the ground."

This is a most outrageous misstatement of the whole facts of the case. The conversation which I alluded to with Dr. Chadwick of Boston referred to the idea which I had entertained for some time previous to carrying it out—of removing the uterine appendage in order to arrest the menorrhagia of myoma. I have not since discussed this subject with Dr. Chadwick, and, therefore, I don't know whether he remembers it or not, but if I were to do so, I think I could easily recall it to his recollection.

The first operation which I performed was upon the eleventh of February, 1872, which was seven months before Dr. Battey's first operation, and it was published in my first series of cases in 1878, and is given in detail on page 323 of my last book on the "Pathology and Treatment of Diseases of the Ovaries," published by Wood & Co. of New York.

There is no excuse for Dr. Battey mixing it up with another and totally different case of mine, of removing the uterine appendages for myoma, the operation having taken place on the first of August, 1872. Concerning this patient a curious mistake took place in the list of cases which I made up in 1880. I recorded the case as having been fatal, and I

subsequently discovered that I had confused her with another patient who had been operated upon on the same day, and who did die, and the case of the removal of the appendage recovered and remains up to the present day in perfect health.

When Dr. Battey was my guest in Birmingham in 1881, I brought this patient for him to see, and she told him her own story; he questioned her and evinced not an atom of skepticism about the story which she and I had to tell. Had the mistake been the other way, and I had recorded as a success a case which had really died, some kind of *mala fides* might have been suspected against me; but surely no man could be such an ass as to deliberately record against himself a case as a failure when it had been a success. This is what Dr. Battey calls "a clerical error buried in the ground."

Dr. Battey has no excuse whatever for this misrepresentation, for in the *Atlanta Medical Journal*, in reply to an attack of his, I gave him the same reminder nearly two years ago, and I know he read it.

Concerning all the other matters, Dr. Arthur Johnston and Dr. Rufus Hall have made such complete replies, in language couched in dignity and overwhelming in logic, that I need not occupy your space further.—I am, etc.,

LAWSON TAIT.

Very respectfully,

RUFUS B. HALL.

281 WEST SEVENTH STREET, CINCINNATI, OHIO.

[Form 2]

The Cleveland Medical Gazette.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY

ONE DOLLAR PER ANNUM IN ADVANCE.

Vol. III. begins with November, 1887. Subscriptions can begin at any time.

REMITTANCE OF MONEY.—All money should be sent by P. O. Order, Postal Note or Registered letter. In no case should money be sent by check, except on New York or this city.

Original Communications, reports of cases and local news of general medical interest are solicited. All communications should be accompanied by the name of the writer, not necessarily for publication.

All letters and communications should be addressed to the CLEVELAND MEDICAL GAZETTE, No. 143 Euclid Avenue, CLEVELAND, OHIO.

Changes for advertisements must reach us not later than the second week of the month to be corrected in current number, addressed to W. N. GATES, Manager Advertising Department, 10 Public Square.

EDITED BY A. R. BAKER AND S. W. KELLEY.

EDITORIAL.

A MONUMENT TO THE MEMORY OF JOHN DELAMATER AND HORACE A. ACKLEY.

The following circular letter has been sent to all of the Alumni Association Medical Department W. R. U., whose address is known to the secretary :

A CIRCULAR LETTER.

To the Alumni of the Medical Department of Western Reserve University :

DEAR DOCTOR:—At a meeting of the Alumni Association, held in Cleveland, March 7, 1888, the following resolution was introduced :

WHEREAS, We learn with deep regret the fact that no monument or stone marks the resting place of the earthly remains of Drs. John Delamater and Horace A. Ackley, eminent teachers and co-laborers in the early history of this institution ; therefore, be it

Resolved, That as a mark of respect to the memory of these self-sacrificing men, whose professional services were more of charity to others than of profit to themselves, this Association appeals to its membership to contribute a sufficient amount to erect, in some suitable location, hereafter to be designated, a plain monument commemorative of their valued lives.

On motion, this resolution was unanimously adopted, and the committee named below were appointed to carry it into effect. That committee deems it advisable to address this circular letter to each Alumnus, soliciting a contribution of two dollars, and hoping that it will be considered a matter of professional pride and pleasure to aid in erecting such a memorial to these honored names.

Contributions may be sent to Dr. Proctor Thayer of Cleveland, Ohio, or any other member of the committee, who will act as custodians of the fund until it is sufficiently large for the purpose specified.

Respectfully,

Committee.	{	A. M. SHERMAN,
		PROCTOR THAYER,
		J. H. LOWMAN,
		J. C. PRESTON,
		S. W. KELLEY.

CLEVELAND, OHIO, March 15, 1888.

To anyone acquainted with the history of the Medical Department of Western Reserve University or to any resident of Cuyahoga county of the last generation, any explanation or words of commendation of the project set forth in the foregoing circular letter would be superfluous. Thirty years ago Delamater and Ackley were known not only in the profession, but by wide-spread public reputation, as foremost men in medicine and surgery. At this time a short sketch may be of interest and value not only to alumni of Western Reserve, but to all medical men among our readers who are not already acquainted with the story of their lives. All who admire strength and originality in character will find

their emulation raised in contemplating these two men, for these characteristics they both possessed in very large degree. Ackley, while rough and unpolished in a general way, and meagerly educated outside of his profession, was a very genius in anatomy and surgery. Ask any old resident of Cleveland, in or out of the profession, what kind of man was Dr. Delamater, and he will answer, "He was a noble man—a truly noble gentleman and a skillful physician."

After considerable efforts we are able to present our readers with portraits of these two notable doctors, one of which appears in this number.

John Delamater was born at Chatham, New York, April 18, 1787. He came of Huguenot and Hollandish stock, his name bearing evidence to his French and his face to his Dutch lineage. John was originally expected to follow in the footsteps of his father and live a farmer; but a slight physical injury unfitted him for the farm work, and so he was set aside for the ministry. It frequently occurs that what seems the weakest lamb of the flock is sacrificed to the Lord. Perhaps the puny scion has not vim enough in him to do anything bad, and so it is concluded that he is expediently good and should be educated for the ministry. Fortunately the clerical ranks are not entirely made up upon this plan; and fortunate, too, is it that some who were selected as physical weaklings proved to be intellectual and moral geniuses or giants. Young Delamater was to be educated, and as the family about this time removed to Duaneburg, Schenectady county, he was placed under the tutelage of a thoroughly educated clergyman of that place. Here he studied for several years; his health also improved and he found himself inclined to the profession of law. To this his father objected and they compromised the matter by agreeing that he should study medicine, the young man's ardor and the old man's judgment rightly seeing in the medical profession greater opportunities for the exercise of versatile talents and the development of a symmetrical manhood than are offered in either law or theology. He studied medicine with great zeal and assiduity, and at the age of nineteen, being

licensed by the Medical Society of Otsego county, he formed a partnership with his uncle, Dr. Dorr of Chatham, and entered into the practice. Here he remained three years and then removed to the town of Florida, Montgomery county, and afterward spent a year at Albany. He then, in 1815, established himself at Sheffield, Berkshire county, Massachusetts, and during eight years of residence at that place became recognized in and out of the profession as a practitioner of singular ability and a man of rare worth. In the year 1823, being then thirty-six years of age, he was offered a professorship in the Berkshire Medical institute, at Pittsfield, Massachusetts. His broad knowledge, acquired by extensive reading and close observation, and his clear and logical mode of thought now found expression in simple, strong and lucid English, which won for him a recognition as a lecturer equal to his reputation as a practitioner. In 1827 the regents of the state of New York, for the benefit of the western district, opened a medical school at Fairfield, Herkimer county, called the Western Department of the University of New York. Dr. Delamater was called to a principal chair in its faculty. Here during the following ten years he devoted his energies to scientific education, and his reputation extended over the whole country. He visited Cincinnati, upon a call from the Ohio Medical college, and delivered a course of lectures there, and although urged to remain and permanently connect himself with the college, he chose his work rather at the projected medical institute at the village of Willoughby.

It was in the year 1839 that Cassels and Ackley—who had been students of Delamater, Cassels at Fairfield and Ackley at Palmyra, but who had by that time distinguished themselves in the profession—united in a project with a third Western Reserve doctor, Kirtland, already famous for his knowledge of general science and natural history; and these three physicians unfolded to Dr. Delamater their scheme, which was to establish a medical college at Willoughby; a large tract of land being offered to the institution by old Dr. Willoughby, after whom the place was named. He joined

with them. Here for six years they labored to establish their college upon a permanent footing, until in 1844, when some two hundred citizens of Cleveland had jointly furnished means and erected a building for the purpose, the Willoughby Medical Institute was removed to Cleveland and became Cleveland Medical College or the Medical Department of Western Reserve College (now University).

A portion of the faculty who did not enter into the project of removal to Cleveland remained at Willoughby a few years, and then went to Columbus and started Starling Medical College at that place.

Dr. Delamater occupied the chair of general pathology, (?) obstetrics and diseases of women and children. While actively engaged at Pittsfield and Fairfield, he found time to deliver full courses of lectures at Bowdoin College (cotemporary with Longfellow), at Dartmouth and at Geneva. He delivered in all not less than seventy courses of lectures, embracing nearly every branch of medical science, his versatility enabling him to lecture with equal success in almost every department, and making him in great demand at every institution whose faculty might be incomplete.

Again and again was he offered high positions in some of the largest cities and institutions in this country, but declined because his instincts led him to prefer the quiet of country life. He would rather have lived secluded at the village of Willoughby than in the growing town of Cleveland, but his love of the profession and its school of instruction persuaded him to the location which was best suited to the success of the institution.

It is probable that during his life he aided in the education of more young men for the medical profession than any man of his time, and there are many yet to testify to his skill in elucidating the truths of medical science. In an address on the life and character of John Delamater, delivered before the alumni of the Cleveland Medical College, March 3, 1878, J. E. Ingersoll (class of '53) said: "I recall the language and style of Dr. John Delamater in his lectures, all that a student could desire in simplicity, directness and complete-

ness of the subjects presented. If the student sat only to be entertained by showy rhetoric, he would be disappointed. If his object was to learn what medicine as a science, and the practice of medicine as an art, had to offer, told in language plain, sufficient, but never expletive, and in the modest, quiet tones and manner of a fireside talk, then could he sit charmed for the hour, while the head bowed with the weight of its sound grain, and from a face beaming with goodness and grace, opened a mouth which 'distilled its speech as the dew.' It was my habit to take minutes of the various lectures which I attended, seeking to so condense the remarks of the professors that by a few minutes' review on the following day, I could come fresh to the 'quiz' and to the resumption of the subject under study. But such was Dr. Delamater's style for simplicity, dispensing with all superfluous words, and using the plainest, directest Saxon to formulate his ideas, that, although the doctor was rather slow of speech, yet I found in my experience that it was beyond the power of my note-taking to capture all the ideas given in a lecture. They were already condensed, and when a subject had been finished, so far as it was possible to deal with it in a course of lectures, the student who had made himself the recipient of what had been said felt that, whatever might be desired more in order to become familiar with the detail, nothing was to be eliminated, not even a word, from what had been given. Dr. Delamater had no inclination to adopt or delight in that style of language which was satirized so tartly by the famous Frenchman, who defined it to be 'a garment for the concealment of ideas.' "

Referring to the foregoing, it is said (Dr. H. K. Cushing): "Professor Delamater is here described in his later years, when he had lost his teeth, and in order to enunciate distinctly was obliged to speak slowly. That in his more vigorous years he often spoke quite rapidly and always with great earnestness and force. In '49 he was still a most graceful and accomplished lecturer, and it was a rare treat to hear him." It was such lecturers as Professor Delamater who,

although very few compared to the whole number of medical teachers, have contributed more than any other factor to the establishment of the lecture system of medical education in this country. If all medical lecturers, by natural talent or by training, were as apt at instruction, as charming, as clear and accurate and as ready, it would be a long time before the superiority of the recitation system would cause its adoption.

But good teachers are more plentiful than first-class lecturers. A good average teacher by the recitation system can do more to hold the attention and instruct the mind of the average student than can anyone less than a first-class lecturer by the lecture system ; and the general adoption of the recitation system in medical colleges would average better results in thorough education.

It was Delamater who first directed the genius of Ackley into medical lines ; and even in after years, when they were associated in professional business and college work, it was to Delamater that Ackley came for advice in times of trouble and perplexity. There was that in the quiet power and even balance of Delamater's mind and temperament which controlled and steadied, as nothing else could, the brilliant but impulsive Ackley.

After resigning from active duty at the college, receiving the title of Emeritus Professor and also of Doctor of Laws, he still continued to practice, as the infirmities of age permitted, being often called in consultation upon difficult cases. In fact, a large part of his practice, after he came to Cleveland, consisted in consultations and difficult cases referred to him by former students of the institutions where he had taught, or by his colleagues.

John Delamater would have been a prominent man no matter at what period of history he had come into the world. He was not a character to make a dazzling success in some special line and a dismal failure in another direction. From every point of view he was a man, and would have made a success of anything he chose to undertake. He was a fine surgeon, although he made no display of what he did in that

direction, some brilliant operations never being even reported; and he stepped aside for others, ambitious in that line, merely because he was willing to make himself generally useful. Under no circumstances would he have been conspicuous for eccentricity. He had marked traits, as have all great characters, yet were they all admirably proportioned.

If he had followed his inclination and studied law, his in-born probity would have raised him out of the regions of legal trickery into the fairer fields of equity. It is quite possible that a career in the profession of law would have brought him upon the judge's bench. His mind was judicial rather than legal. It was foreign to his nature to look only on one side of a question. It must be fairly examined all round before judgment rendered her decision.

If he had entered the ministry, not merely his powers of logical discourse would have won him distinction among learned and eloquent divines, but his lofty moral sense, his simple and fervent and practical piety, his zealous industry and sublime faithfulness would have made him a veritable pillar of light in every community where he chose to dwell.

Think of the famous doctor never entering upon a surgical operation without first imploring strength and skill of Him who fashioned man out of the dust. And in the busiest time of a large and laborious practice at the zenith of his fame, he always found time to maintain family worship.

Yet all this without the slightest ostentation. In religious life he was as plain and frank, open and outspoken, as in the every day affairs of life. Religion was an every day affair with him, the controlling element of the business of life. He wished that it might be stated on his tombstone that he had been a deacon in the church. He did not care for other inscription. That was honor enough for him.

Refined by nature and by education, pre-eminent in knowledge and in skill, acquainted with all the conventionalities, and seeing through all the artificialities, he yet remained modest and plain, free from the slightest affectation or ornamentation in dress, manner or language—Franklin-like in plainness. With all his skill he was yet distrustful of him-

self, and as earnest a student all his life as any who sat under his teaching. His interest in his professional work and faithfulness to his patients should have shamed all the triflers out of the medical ranks. To Dr. H. K. Cushing, who gives it as characteristic of the man, he once said, not boastingly, but as giving a secret source of comfort, that he "never went to bed without the consciousness of having done everything that duty required for my patients, and as well in all other affairs."

"In the course of his medical practice, as I learn from those who were often with him," writes Judge Ingersoll, "his character of faithfulness made him very attentive, especially in times of critical condition. His daughter informs me that she has often accompanied her father on his professional visits, when, upon finding some unexpected complication, he would decide to spend the night, and if no convenient lounge were at hand, as would often occur in the abodes of those he waited upon, taking his old-fashioned pill-bags for a pillow and the floor for a mattress, he would camp in true soldier style right on the field of battle. From the same source of information I learn that often upon coming home at a late hour in the evening, after resting for two or three hours in bed, he would get up and for hours walk the house, carrying the burden of anxiety concerning the case of some suffering patient; or, perchance, if there should occur to him some new means of relief, the horse and chaise must be instantly made ready, and no persuasion could postpone till morning the prompt doing of what his studious consideration of the case had suggested."

Upon the testimony of Dr. Cushing, sr., who began the study of medicine when Dr. Delamater was at the Pittsfield Institute, we learn that "after being engaged through the day with his studies at the college, he would mount his horse, which had, prior to the doctor's ownership, and under the training of a turfman, made such a record of speed as was in those days considered quite fast in a New England village, and hurry away twenty miles to his home in Sheffield, attend to his patients by night, and on the following morning

start early enough to ride fourteen miles before breakfast; and as he would sit at the hotel waiting for its preparation, he would sketch out the skeleton of his day's lectures, and after his breakfast, another ride of half a dozen miles would bring him up promptly at his lecture room, an instructive teacher welcomed by an attentive class."

Here was industry that required considerable physical energy for its maintenance.

Dr. Delamater always had one or more students about him, whom it was his custom to hear recite—often between the hours of 5 and 6 A. M. And when he rode in a vehicle he was always accompanied by a student, whose duty it was to read aloud from book or journal as they rode along. It was by these means, it is thought, and silent pondering during lonely rides, that he managed not only to keep abreast of the times but to acquire that wonderful familiarity with every department of medicine. Upon the witness stand he always enlightened judge and jury, and without the use of technical terms; and on different occasions he made such a clear and logical statement of principles and facts, and their relation to the case at bar, and that with such evident honesty and fairness, that not only the jury but the lawyers on both sides were convinced that his view of the case was the right one.

He practiced medicine sixty years. Down to the very year before his death he continued to make some professional calls, and was devoted to the interests of the profession. And when his limbs could no longer support him, and he could not leave his bed, his patients came still to that sagacious old head for advice.

Yet such had been his benevolence through all these years of toil, that with a large and expensive family into which came much sickness and suffering, he accumulated no property nor money. He had always answered calls regardless of the patient's ability or inability to pay. Someone was suffering—that was enough for him to know, and he went and administered relief, as willingly and persistently and carefully if it was a poverty-stricken laborer out of work as if it was in the

family of a flourishing merchant. If when any case was ended he found the people could ill afford to pay, why, he receipted the bill, and that settled it. And it was his custom never to make any charge for services rendered to patients in a dying condition.

In person Delamater was tall and well formed, of the blonde type, with blue eyes and brown hair; in his prime having considerable color in his cheeks, and graceful and active in movement. Although quiet and unobtrusive, there was that in his manner and bearing that soon made it evident even to strangers that there was present an unusual man.

At his death the Rev. Dr. Goodrich pronounced a most just and fitting eulogium, delineating many of his prominent characteristics.

If this sketch has succeeded in outlining, however imperfectly, the life and character of this great and good man, it will make very evident the propriety of erecting a suitable memorial to mark the resting place of his earthly remains.

Who should claim the honor of appreciating and doing homage to such a virtuous and useful life, if not those engaged in the same profession and striving after the same ideal? And whose especial privilege and duty should it be, if not the sons of the noble institution which he founded?

GLANDERS.

The fact that over fifty horses are suffering from this malady, owned by the Brooklyn Street Railroad company, is a matter of much interest to all owners of horses, as well as to every resident of the city. Additional importance is added to this fact, as the disease has existed for some months in the stables of this company unrecognized, and it is entirely probable that many horses have been exposed to the disease as well as human beings.

Glanders is a disease most often found in the horse and communicable to man. The disease appears in two distinct forms, in one case affecting the mucous membrane, and in

the other the skin. In most languages the disease has been given two names, and this has led to much confusion. In English the name glanders is used to designate the typical affection of the nares, and farcy for the skin affection. In German the first is called *rotz* and the latter *wurm*.

The disease belongs to the same general class of granulation infectious tumors, like tuberculosis, syphilis, lupus, etc. By some veterinarians it is regarded as acute tuberculosis in the horse. Van Helmont sought to refer its origin to syphilis, a view which was much later adopted by Ricord. Virchow has shown that this idea most probably arose from the supposition that both diseases appeared during the siege of Naples, toward the end of the fifteenth century. Glanders was, however, known and described in the fourth century under the name of *μαλὴς* and *malleus*, by Apsystus, a veterinary surgeon in the army of Constantine.

In horses glanders is usually primarily located in the nose, but from this primary seat other organs are affected, the disease spreading, both by contact of adjoining parts with the secretions of the nose, which contain the virus, and by conveyance of the virus to distant organs by means of the blood and lymph-vessels. At a very early period the virus is carried along the lymphatics to the submaxillary glands, and these become enormously swollen.

Glanders never develops spontaneously. It has long been suspected that it has been due to some specific living virus, and various observers have described numerous organisms, micrococci, etc., in the nasal secretions. Drs. Löffler and Schultz, working in the German health office, have discovered characteristic bacilli, both in the secretions from the ulcers and in the nodules, which are of the same size as, and have nearly the appearance of, tubercle bacilli. This discovery was only made possible by the preceding work of Koch, and has been confirmed by numerous other observers, and glanders is now added to the list of diseases in which a specific lower organism is known to be the etiological factor.

In view of the high susceptibility of man to the disease,

these experiments are not without danger, and one of the most eminent of German pathologists has lately fallen a victim of his zeal in carrying on these observations and experiences.

The horse is almost the exclusive source of the disease in man, and infection takes place relatively often. This depends on man's susceptibility to the virus, and the opportunity for infection to which persons employed in the care of horses are exposed. In one hundred and six cases collected by Bollinger, the occupations of the subjects show clearly the source of infection. Out of the one hundred and six, there were forty-one horsemen, eleven coachmen, fourteen land-owners or owners of horses, ten veterinary surgeons, twelve horse butchers, five soldiers, four surgeons, three gardeners, two horse dealers, three employés of a veterinary school.

The infection generally takes place from wounds on the hands, from the conjunctiva, and from the mucous membrane of the nares and throat. The latter places are infected by contact with the nasal secretions of the horse, which are cast out in considerable distance in the frequent snorting of that animal. All recent authors are agreed that the prognosis in glanders is very bad. Prophylaxis can effect much more than treatment. Great stress should be laid on the importance of at once killing any animal that is infected.

There is a valuable article on this subject, by W. F. Councilman, in the 'Reference Handbook of the Medical Sciences,' Volume III., published by William Wood & Co., to which we are indebted for much of this editorial.

SPECIALISM IN MEDICINE.

An editorial writer in the New Orleans Medical and Surgical Journal says:

"Specialism, after a hard fight for recognition, has at the present day gained such an ascendancy, even among medical men, that one of the first thoughts of the medical student is the choice of a specialty.

It is a very vital question whether this division of labor is

advantageous to the healthy progress of the medical science.

The laymen or those outside of the medical profession have no hesitancy in approving the most extreme division of labor. To them a physician who devotes himself exclusively to diseases of the left fore-finger must certainly understand the left fore-finger better than anyone else. The more enlightened, perhaps, look forward to the day when, instead of one family physician, they will keep a list of a dozen, or perhaps two dozen, neatly labeled with the different portions of the body which they treat, and from which they will choose *pro re nata*.

From the easy comparison with the industries around them, the great progress these have made by this division is a demonstration of the advantages to be derived in medicine by a similar process; but their very unfamiliarity with the foundations upon which medical progress is built prevents them from seeing the disadvantages.

Were we to ask an old-time practitioner his opinion, we can easily imagine the scorn with which he would repel the idea of any of his patients needing any other care but his own. Perhaps, on second thought, he will reluctantly except ophthalmology, but even the eyes of his patients may not escape him until he has tried sassafras leaves or perhaps the borax wash. It is only a bitter experience that teaches him his duty. A glaucoma has not yielded to the decoction of sassafras, and he has some qualms of conscience, but a patient has had the hardihood to go to an oculist, and has been cured, and he finds that he has lost more than he has gained by not having sent the patient there himself. All this makes him accept the oculist. But why this more than other specialties?

The tissues of the eye are built on the same general plan as those in the rest of the body; they have the same inflammations and degenerations.

We see, then, that the condemnation of specialists is as wrong as the too eager welcome of this multiplicity. It is true that the pathology of all the tissues of body has the same fundamental history, and is governed by the same

laws; that it is the same process one place as another, but it looks differently and behaves differently, and has a different meaning in different places, and it takes a varying amount of skill to get at the looks and the meaning in those different places. This skill must come from special study and constant practice.

There is another element tending to keep up specialism, and that is the expense of instruments. Medical instruments are expensive and are subject to constant improvements, which means constant buying on the part of the physician. It would take a small fortune to keep thoroughly supplied in all branches of medicine, supposing one competent to use the instruments."

When we say that specialists are necessary, we do not refer to born specialists, or those made such by a six weeks' post graduate course, or even a three months' trip to Europe. The specialist should first receive a good, general medical education; he should have a hospital experience and should engage in general practice for a number of years; if he then finds that he has special skill in the treatment of certain classes of disease, and if his time and financial condition will permit of his taking a thorough course of special training, including hospital and dispensary practice, he may in some slight degree be fitted to engage in special practice. *If he engages in special practice he has no right to call upon the general practitioner to assist him in any way unless he limits his practice exclusively to his specialty.*

If specialists are made in this manner, and limit their practice exclusively to diseases of their special department, the general practitioner need have nothing to fear from them. Instead of limiting or antagonizing the work of the general practitioner, they only supplement it, lending their special skill and opinion to such cases as the general practitioner may require in consultations, and treating those cases which he has not time to treat, operating upon those cases requiring special skill and experience; in fact, doing only such work as the general practitioner cannot or does not care to do.

It is true, taking this view of the future specialist, his field is somewhat limited, as it should be, and only those will enter upon a special practice who have special qualifications, and who will be of service to the general practitioner. Whether this will prove to be the specialist of the future or not remains very largely for the general practitioner to say. If he countenances no other; if he sends his patients to only those physicians who have proven their fitness to be called physicians by having made good, successful general practitioners (and no one can prove a good specialist who is not a good general practitioner first); if he sends his patients to those only who have had special opportunities for study in their special department, and lastly, if he sends his patients only to those who do *exclusively* a *special* practice, the number of specialists will not rapidly increase, and those who are specialists in every true sense of the word will be an honor alike to themselves and to the profession.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

THE thirty-seventh meeting of the American Association for the Advancement of Science will be held in the Central High School building, August 15 to 22 inclusive.

The citizens of Cleveland have united in promising a hearty welcome to the association, and a large committee has been organized with several sub-committees, all of whom are working earnestly, and so far as depends upon the committee a successful meeting is promised.

A special office and reception room for the association have been opened at No. 407 Superior street, next door to the Hollenden, which will be hotel headquarters.

For all matters pertaining to membership, papers and business, address permanent secretary, F. W. Putnam, 407 Superior street, Cleveland, Ohio. For matters pertaining to transportation, registration, hotels, express matter, publication, programme, excursions, receptions, etc., address local secretary, Elroy M. Avery, Cleveland, Ohio.

Any person may become a member of the association upon recommendation in writing by two members or fellows, and election by the council.

The admission fee for members is five dollars, in addition to the annual assessment of three dollars.

The association publishes annually a very valuable volume of transactions, a copy of which every member is entitled to receive.

The meeting will be called to order in general session, Wednesday, August 15, at 10 A. M., in the large hall of the High School building, by the president, S. P. Langley of Allegheny, who will resign the chair to the president-elect, Major J. W. Powell of Washington. After the adjournment of the general session the sections will organize in their respective halls. In the afternoon the sections will meet, and the vice-presidents will give their addresses. In the evening President Langley will give the presidential address. The meetings of the sections will be held on the following days, except Saturday and Sunday, until Tuesday night, when the concluding general session will take place. Saturday will be given to excursions, including one on the lake, on the *City of Cleveland*, to Put-in-Bay.

Among the receptions which will be tendered the members of the association will be a joint one by Messrs. Gordon and Holden, which will be given at Gordon Park, the finest private grounds in the city, if not in the United States.

We are pleased to note that the oversight of the local committee ignoring the medical profession in making up the various sub-committees has been corrected, and we hope to see a large delegation of physicians present at this notable meeting of scientists.

COMMENCEMENT EXERCISES OF THE MEDICAL DEPARTMENT OF WOOSTER UNIVERSITY.

THE exercises of the twenty-sixth annual commencement were held in the Church of the Unity, Wednesday evening, July 25, 1888. Dr. Grace Peckham of New York city

delivered an address on the subject, "Shall Women Practice Medicine?" In the course of her address she said: "There is no sex in mind. The apparent difference between the feminine and masculine mind is an educational and not an anatomical one. It cannot be said that a masculine mind can be transmitted from father to son, or a feminine mind from mother to daughter. The boy is taught and trained to make his way in the world, and if he falters he is laughed at. 'Be manly' is his daily exhortation. The girl, on the other hand, is trained differently. 'Be lady-like' is the injunction laid upon her, which means that she shall conform to certain conventionalities of society. The young man is sent to college and prepared for active life. The young lady is made ready for society. What has she to look forward to? Her introduction into society, balls and parties, and perhaps to marriage. If she does not marry, she turns her mind to seeing how she can be useful in the world. And then the father and brother are fearful lest she may do something to imply that they are unable to support her. By many the higher education of women is deprecated, as is also any kind of hard work, on the ground that women are not intended for difficult tasks. In America there is not enough attention paid to the physical education of women. There should be more colleges for women, and it is certain that the colleges already in existence are doing much to improve our young women. If our young ladies should turn their attention to the great scientific problems, what great discoveries could be made in every direction! Women have done enough of these things to show their power. Having shown that there is no sex in mind, and that the world loses an immense power by not insisting that women should study as men do, I will take up my subject, 'Should Women Practice Medicine?' In the first place it does not follow that a good student of medicine will be a good practitioner. There are many qualifications that a physician must have. He must understand human nature completely, and have tact and patience as well as skill. It has been objected that women lack the strength necessary to practice medicine. Much is

required of the physician, and I urge you, graduates, to consider the life upon which you are entering. The responsibility of writing a prescription is great, and I never prescribe opium without the greatest care. He must guard jealously his reputation, which is his stock-in-trade. It may be easily destroyed, but it is hard to build up. There are many things which tend to break down the physician's strength, but the strain is largely mental rather than physical. I have never seen the time when a man's strength was necessary to carry out the office of a physician. The next question that arises is whether women have the time to practice medicine. I venture to say that many women spend more time in their round of social duties than the doctor does in his professional rounds. If women have the mental qualifications, if she have the physical strength, and if she have the time to study medicine, it may be asked whether there is any need for women in the profession. Are there not already too many physicians? Medicine is scientific and practical. It is true we have too many of the one kind, but not enough of the other. There are not enough of physicians who can devote their energies to original investigations, and this is the great field for women physicians; and if the competition of women physicians should be the means of raising the standard of medical education, this alone would be sufficient excuse for their existence."

President Scovel delivered an address of considerable length, which was a stirring appeal for a higher medical education. "Better education," he said, "is the watchword of the last decades of the nineteenth century. The community cries for better education for the physician. The physician must not give up study when he begins practice. He must keep up with the times. To neglect this might in another be careless. In the physician it is criminal." Dr. Scovel pleaded especially for a higher preliminary education of medical students. We hope to be able to present this address to our readers at some future time.

The valedictory address was made by Levi M. Imhoff. The music was furnished by the Germania orchestra. Mme.

Etta Feil sang a selection from the "Bohemian Girl," and divine blessing was invoked by Rev. Dr. J. M. Sturtevant. The graduates were Oliver Perry Morton Andrews, Homer Clark Bennett, Augustus Keefer Boom, Upton M. Carnes, Truman Coates, jr., Mahlon Willson Cochran, Stanton Kemble Crawford, Phinley L. Cunningham, Samuel M. Eash, Joseph J. Gordon, jr., Levi M. Imhoff, Charles V. Lucas, Mark S. Leavy, John G. Noland, John H. W. Pomeroy, Joel Pomerene, George N. Simpson, Alter L. Slonaker, Thomas Richard Stack, Lillian Gertrude Towslee, William Edgar Wirt, William Irving Wood. An informal reception was held at the Stillman after the commencement exercises.

THE ALUMNI ASSOCIATION

Met in the afternoon in the college amphitheatre and was well attended, better than any previous meeting. Dr. Merz read an address, in which he congratulated "the graduates of a grand old school which has held her own among many adversities, and which is now striving to maintain that high standard of medical education which has characterized her course in literary and medical circles in the past." He offered the following suggestions for the consideration of the association :

- I. That there be a revision of the constitution and by-laws.
- II. That a committee be appointed to consider any methods that may be suggested for furthering the interests of the college.
- III.—That the association encourage in every way an active correspondence between members and the secretary.
- IV.—That the secretary be provided with the means of procuring and forwarding to every member a blank for answers to such questions as are deemed necessary for the publication of a full and complete catalogue of the alumni, their work in the profession, etc.
- V.—That this report, together with an announcement of such changes in the faculty and curriculum as may be made from time to time, and containing a brief circular letter commending the institution to the public, be sent out with the annual catalogue.
- VI.—That a speaker be appointed for the next meeting and that suitable entertainment be provided.

NEW BOOKS.

'THE ANNUAL OF UNIVERSAL MEDICAL SCIENCES,' an annual report of the progress of the general sanitary sciences throughout the world. Edited by Charles E. Sajous, M. D., and seventy associated editors, assisted by over two hundred corresponding editors, collaborators and correspondents. Illustrated with chromo lithographs, engravings and maps. In five volumes. F. A. Davis, publisher, Philadelphia. 1888. Price, fifteen dollars.

The 'Annual' is a selection of the points worth noting, in the articles of value written during the year, arranged and classified and subdivided, when the amount of material permitted of it, into the several sub-sections of disease, etiology, pathology, treatment, etc. The associate editors having introduced, besides their views, deductions and personal experience, the work is in reality more of a text-book, based upon the literature of the year, than simply a collection of abstracts, such as Schmidt's 'Jahrbucher,' 'Revue des Sciences Medicales,' the 'London Medical Recorder,' and other publications of the same order.

From the excellent showing made this year by the corresponding editors, especially those in semi-civilized or uncivilized countries, the work promises to be of great value in bringing to light clinical data that will materially aid in elucidating many doubtful questions in diseases common to those countries, but rare in ours.

A collection of such a vast amount of matter will furnish ample opportunity to compare, and as comparison is the primary element of progress, the 'Annual' should, it seems to us, prove of service to investigators, particularly of this country.

Its large circulation abroad will contribute materially to show the prominent part taken by the American medical press and writers in the general advance of the medical sciences.

When we say that the 'Annual' has more than met our expectations, we but express the sentiment of every subscriber.

The editors and publishers deserve great credit for the thorough and prompt manner in which they have performed their work.

In typographical appearance the books are all that could be desired. In the brief space at our command we cannot attempt to give a *résumé* of the work. As it is the only work giving anything like a complete summary of medical progress throughout the world in the English language, we have no doubt but that it will find its way into the library of almost every physician.

Every page gives evidence of thorough, conscientious, painstaking labor on the part of the editors and associates. Although it presents considerable unevenness, it could not be otherwise in dealing with so many subjects covering such a wide field—some of the editors having introduced their own ideas almost to the exclusion of other matter; while others, whose views we should have been glad to have seen expressed, have kept themselves almost entirely out of view.

The method of referring to original papers is on the whole to be recommended, but if some method could be devised by which the number and page could be indicated without occupying too much space, it would be desirable. The index does not seem quite satisfactory, although it may improve upon acquaintance. But these, however, are minor matters, and will undoubtedly be improved in future numbers.

'THEINE, IN THE TREATMENT OF NEURALGIA, BEING A PHYSIOLOGICAL CONTRIBUTION TO THE THERAPEUTICS OF PAIN,' by Thomas J. May, M. D. Published by P. Blakiston, Son & Co., Philadelphia. 1888.

This valuable essay of Theine was originally published in the *Polyclinic*. The author devotes one chapter to the physiological action of Theine, another to its special therapeutic indications, and another to its application in the treatment of neuralgia and other painful diseases. He calls attention to the unreliability of ordinary commercial Theine.

To anyone interested in this subject this will be found a valuable little work.

NOTES AND COMMENTS.

A good book to read this month is A. Jacobi on diseases of children. Its author needs no introduction to our readers, and many of them may be acquainted with the treatise. Some, however, may not be aware that although it is a book of 300 pages, it can be had in stiff paper cover, postpaid, for 25 cents. It is No. 5 of the Physician's Leisure library, published by Geo. F. Davis & Co., Detroit, Michigan.

The New York Polyclinic Hospital.—The faculty of the New York Polyclinic have decided to increase the clinical facilities of this institution by establishing a spacious hospital immediately connected with the college building. It will be opened for the reception of patients in October next.

At the recent meeting of the Medical Institute for Homœopathy, at Niagara Falls, the following resolution was adopted :

That after the college session of 1890-91, all homœopathic colleges of this country shall require of their graduates three years of medical study, including three full courses of didactic and clinical instruction of at least six months each ; that this institute shall, after 1891, require of all applicants for membership graduating after that time full compliance with the above requirements for graduation.

For Sale.—A practice cheap ; a good place for a young man who wishes to do a cash business in a small town in western Pennsylvania. No property to buy. Address P. Care of MEDICAL GAZETTE, Cleveland, Ohio.

As was to be expected, yellow fever has again appeared at Plant City, Florida, and at Manatee and Tampa. Indeed, it is a question whether it has been absent at any time since the fall of 1887. One thing very certain is that it will take a much more thorough course of disinfection than has ever been practiced heretofore in Florida to render Plant City a safe stopping place for any unacclimated person. The burning of a few pounds of sulphur and the cleaning up of a few premises will not rid that unfortunate village of the poison

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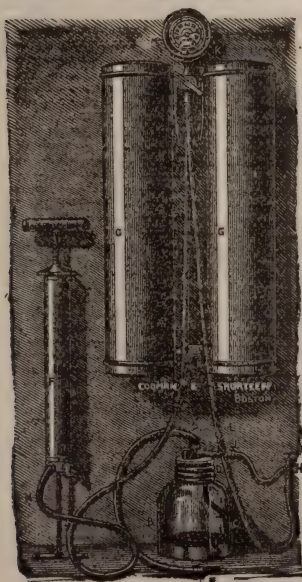
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The Sub-Committee of Dietetics

—ON—

Infant Feeding,

AT THE

American Medical Association, May 9, 1888,

Recommended a formula for an Infants' Food as a very efficient substitute for mothers' milk. This formula closely resembles that of CARNRICK'S FOOD, and no other prepared food in the market can claim a like resemblance.

THE FORMULAS.

Formula recommended by the
Sub-Committee on Infant
Feeding, as above stated.

Desiccated partly peptonized milk in the form of a milk-food, containing partly converted starch (soluble starch or dextrin) and a small quantity of lactose is a convenient and (when well-made) a very efficient substitute for mothers' milk.



Formula for Carnrick's Food.
Evaporated or desiccated milk, partly peptonized and thoroughly sterilized by heat, 45 parts.

Dextrin, Soluble Starch and Milk Sugar, 55 parts.

This forms a fine dry powder, which will keep in any climate, and only requires the addition of water to render it a suitable nutrient for infants, or adults whose digestive powers have become impaired.

Carnrick's Food contains about five per cent. of fat. This is the largest amount possible to combine in a stable preparation presented in a powdered form. In cases where a larger amount of fat is desirable, a small quantity of cream may be added.

We do not claim this food to be "a PERFECT substitute for human milk."
But we do claim that

CARNRICK'S FOOD APPROACHES NEARER TO HUMAN MILK IN
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and that it is the only infants' food that will, without the addition of cows' milk, thoroughly nourish a child from its birth.

We believe that CARNRICK'S FOOD solves the problem of a reliable substitute for human milk. The Casein of cows' milk, by partial predigestion with freshly made Pancreatine, is rendered as easily digestible by the infant as human milk, and, by thorough sterilization with heat, made aseptic, thus avoiding the objection to the use of milk foods in Cholera Infantum.

Full information regarding the process of manufacture will be cheerfully furnished and samples sent free to those who wish to test CARNRICK'S FOOD.

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which is, perhaps, now well domiciled in the houses, furniture, carpets, curtains and wearing apparel of the inhabitants. The history of the house at Scranton should convince people of the tenacity of life of the yellow fever poison.—*New Orleans Medical Journal*.

About the changes in the arteries of consumptives, Dr. N. C. Ippa, (Uratch t. ix. No. 20), after reviewing the literature of the subject and stating the methods of his experimentations, arrives at the following conclusions:

1. The arteries have appeared changed by processes entirely similar with chronic fibrous endarthritis.

2. Connective tissue has appeared in the intima even of such vessels which do not contain it normally, as the axillary radial, uluar, femoral, popliteal, anterior tibial, temporal and coronary of the heart.

3. In those arteries, the intima of which normally contains a layer of connective tissue (as the arch of the aorta, abdominal aorta, common and internal iliac until the origin of the umbilical artery, but which connective tissue only appears in extra-uterine life. *Prof. R. Thoma. Virchow's archive t. xciii.*) there is present in the consumptive a strong development of this layer.

4. The most pronounced changes have been met with in the coronary arteries (playing such a great role), in the intima of which the connective tissue sometimes occupied the whole field of the microscope.

5. The most insignificant changes have been found in the axillary artery, in the arch of the aorta and femoral.

6. No changes have taken place in the basilar and pulmonary arteries.

7. In the media atrophy of the muscle fibres has been found with the formation of connective tissue in places corresponding with the alterations of the intima. These two processes go hand in hand.

The investigations have been made on vessels taken from consumptives, died between fifteen and thirty years of age.

In conclusion the writer says: Whether these changes are the causes predisposing to consumption (as in inherited

cases of the disease), or are its consequence, remains, as yet, a question to decide which requires the investigation, *cæteris paribus*, of arteries — 1st, in the persons died from other diseases than consumption, but also by exhausting processes; and 2nd, in the persons with so-called *habitus phthisicus* (from consumptive families), died from some other intercurrent disease before becoming affected with consumption. C.

Liability of Druggists for Clerks' Mistakes.—The Supreme Court of Ohio has recently reiterated the general rule of the liability of druggists for negligence in putting up medicines. In this case the drug clerk, when asked for "oil of sweet almonds," carelessly gave the "oil of bitter almonds," and the plaintiff's wife died almost immediately after taking the poison. There was nothing on the bottle to indicate that it was a virulent poison, and it was clear in the evidence that there was gross negligence on the part of the clerk. The druggist denied his personal liability for his clerk's mistake, but at the trial the court decided against him, and the Supreme Court affirmed the decision. This ruling is fully in accord with that of the courts of other states, and probably no tribunal would relieve a druggist under similar circumstances.—*Medical Times.*

At the recent meeting of the Pennsylvania State Medical society, Dr. Wood of Pittsburgh amused the society by moving the adoption of a resolution that the president-elect shall take the following "Hippocratic oath:" "Having been duly elected president of this society, do you promise to hold the Pennsylvania Medical society, as it has been held by many illustrious men, as a stepping-stone to success, as a round in the ladder of fame, as a lemon to be squeezed, as a lever to raise your hopes, as a block and tackle to exalt your ambition, as a peacock's feather in a jackdaw's tail, as a lion's skin on a sheep, a spur on a knighthood's heel, a garter on the leg of a courtier, a medal on the breast of a hero, and a convenient method of advertising your business, and that as soon as your time expires you will forever turn your back on it and ignore it? Selah!"

— THE —
Cleveland Medical Gazette.

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No. 11.

ORIGINAL ARTICLES.

OBSTETRICS AND GYNÆCOLOGY.

BY E. S. M'KEE, M. D., CINCINNATI.

“Eight Cases of Tubal Pregnancy with Fatal Results” was the subject of a report to the Vienna Obstetrical and Gynæcological Society by Professor E. V. Hoffman, Vienna Medical Press. Out of these eight cases six had passed the thirtieth year, one of them being over forty. In one case the age was not known. One had borne before and another had possibly done the same. The pregnancy occurred two times in the right, six times in the left tube, three times in the middle, otherwise always in the internal portion of the tube. In only two instances was there a transmigration of the ovaries, one time from left to right, one time from right to left. Peritonic adhesions of the tube was found in fifty per cent. of the cases. In the others not. In seven cases the rupture occurred in the second month, in the third month but once. In fifty per cent. of the cases several hours, from four to twelve, occurred between the onset of the symptoms and the death of the patient—a sufficient time for operative treatment. In the other cases

the history was not exact. In two other cases, on fresh hemorrhage the foetus was found already macerated. Strong torsion of the umbilical cord was also present in one case. The fatal hemorrhage did not always occur with the bursting of the foetal membranes or tubes, but occurred subsequently. Hoffman then showed a case which resulted fatally from the bursting of a pregnancy situated in the rudimentary horn of a bi-cornus uterus, and one case where there was interstitial gravidity from bursting.

In a clinical lecture by Professor Callard in L'Hotel Dieu, on the subject of "Uterine Hemorrhage," the renowned professor recommends the following prescription in treatment:

R Ergot, 150 grains,
 Subcarbonate of Iron, 150 grains,
 Quiniæ Sulphatis, 30 grains,
 Extracti Digitalis, 15 grains,
 M. fiat pil no. 100,
 S. Take two before each meal.

Do contracted pelves have an influence on the sex of the child? This is a question of considerable interest and has been given some attention. Olshausen of Berlin, in a series of 521 deliveries of women having contracted pelves, found 211 girls and 310 boys, *i. e.*, 100 : 147. Ahlfeld arrived at much the same results, *viz.*, 133 boys to 100 girls or 150 : 100. Dohrn ('*Zeitschrift für Geburtshilfe und Gynäkologie*,' XIV., 1, p. 80) has made the last thorough experiments on the subject, in the obstetrical clinic of Königsberg. He collected statistics of 450 deliveries in women who had narrow pelves; 224 were girls and 226 were boys—100 : 100.6. The other deliveries in this clinic were in the proportion of 100 : 101.6. Dohrn is of the opinion that a narrow pelvis has no influence on the sex of the child.

There has always been much mystery connected with the old maid and her first child. Old women shake their heads wisely and solemnly, when a woman above thirty marries and comes to her first child-bed. Eckhardt has given this

subject considerable attention ('*Zeitschrift für Geburtshilfe und Gynäkologie*,' XIV., 1, p. 44). His field for observation has been an extensive one, viz., the Gynæcological Klinik of Berlin. He finds the mortality of the children increases in proportion to the age of the mother. His statistics of mortality of the children reach 19.81 per cent., corresponding very nearly with those of Kleinwachter, 19.26 per cent. The mortality among old primiparæ is nearly three times as great as among the young primiparæ. He observed a regular increase in the rate of mortality when he compared primiparæ in groups of succeeding four years, from twenty to forty years. He found turning done more frequently as age increased among primiparæ, but seldom done after forty years. Forceps deliveries occur three times, and perforation five times as often in old primiparæ as in young. The per cent. of all these operations increases with the age of the patient, and above forty years reaches 58 to 60 per cent.

I am in receipt, with the compliments of the author, of a reprint from the '*Archives für Gynækologie Band*,' XXX., Heft 3, on "Total Extirpation of the Uterus on Account of Carcinoma, Procidentia and Neuroses," by Professor Dr. Leopold of Dresden. This is a lengthy article of forty-three pages and one lithographic plate. It is thoroughly German in massiveness, thoroughness and exhaustiveness. The cases reported consisted of forty-two for carcinoma, four for prolapsus of the uterus and vagina and two for neuroses. In the forty-eight operations he lost but three or 6.2 per cent. Of the three fatal cases, two were from sepsis and one from ileus.

Primary tuberculosis of the Fallopian tubes is a subject in which Dr. J. Koetschau of Cologne is deeply interested. In the '*Archives of Gynækologie*,' Vol. XXX., 1 and 2, p. 265: He had treated a woman, aged forty-five, who had a hereditary taint of tuberculosis and had gone through five normal labors and puerperal periods. She had been subject to hysteria for years, and the menses had been absent for one

year. The patient complained of menorrhagia, dizziness, palpitation of the heart and pain in the region of the liver. Examination showed endometritis, retroversio uteri, perimetritis, oöphoritis chronica dextra. After six months acute pelvo-peritonitis appeared. The abdomen was sensitive to pressure, the uterus retroverted and seven centimeters long; to the right of it there was a movable, smooth, fluctuating tumor, the size of an apple and exceedingly sensitive to pressure. There was no ascites. Laparotomy was performed and the woman died. *Post-mortem* developed that the right tube at the angle was smeared over with a grayish yellow covering. The left tube was thickened, and ended in a thick-walled tunnel without perceptible fimbriæ, and contained some carious material. The mucous membrane of the tubes was excavated, brownish red and covered with a yellow substance. The right tube was much thickened, and lost itself in a fluctuating tumor the size of a hen's egg. This consisted of fluid pus, thick, cheesy-like masses, which were bordered by the floor of the pelvis, the small intestine and ligamenta lata. There were saciform enlargements in the cavity of the tube, which contained similar masses, and in places the walls were thickened and like cartilage. Both ovaries contained this same cheesy material. Microscopically the mucosa of the distal tube endings had the appearance of granulation tissue. Numerous tubercles were found, and there were many evidences of a primary tuberculosis of the tubes. The affection here was much older than that found in the lungs. Whether the latter was secondary to the former, or whether it was a double infection, could not be decided.

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The therapeutics of carcinoma uteri would seem to be asked to take a back seat in the presence of the advances in the operative treatment of the disease. Professor Chrobak, in the Wiener Medicinisch Wochenschrift, XXXVII. , 44 and 45, discusses this important subject. He is perfectly informed as to the great stride made in the surgical treatment, and has great hopes for total extirpation, but is still a believer

in partial amputation. He has always observed relapses after total extirpation, even as late and later than the second year. On the contrary, in amputation of the cervix, if the operation were made in the healthy parts, he has seen a succession of cures lasting as late as the seventh year. The cervical amputation is less dangerous, because the parametritic tissue is not opened, and infection of this tissue is the most frequent cause of a relapse in the total extirpation. In single cases, the question whether the total or cervical operation is to be recommended is not easily decided. The number of cases which are no longer fit for a radical operation is quite large. In the last few years the palliative treatment of these patients has made much progress. Chrobak has removed the diseased parts with knife, scissors and spoon in ninety-six cases. Having washed out the uterus, he dried the surface of the wound and cauterized it, generally with fuming nitric acid, sometimes with the red-hot iron or with chloride of zinc. For tampons, he always used iodoform gauze. In most instances the excavated parts were sutured together and the development of the cancer thus retarded.

The morphia habit, in regard to its effect on the uterus, has been studied by Lutand in Archives de Tocologie. The menstrual flow is diminished or completely suppressed by the long use of the drug. In cases where menorrhagia is present, due to cancer or a fibroid tumor, morphia possesses a distinct hemostatic effect. By the injection of very large doses, Lutand has succeeded in completely relieving the pain, diminishing the hemorrhage and prolonging life.

"Antiseptic Midwifery," a lecture delivered at the Midwives' Institute and Trained Nurses' club, by Clement Godson, M. D., consulting physician to the London Lying-in hospital and assistant *accoucheur* to St. Bartholomew's hospital, is a neat, fourteen-page pamphlet, sent me by the author. When engaged to attend a patient in labor, the doctor orders the following to be ready in the house:

1. Chloroform, 3ii, placed in a stoppered and capped bottle.

2. Extracti ergotæ liquidi, ʒi. Dose, teaspoonful in a half wine glass of water.

3. Acidi carbolici, ʒi, adipis benzoate, ʒ iiss, mix and make into an ointment to be labeled carbolized cream. This is always to be used in making vaginal examinations, but I also order a pot of ordinary

4. Vaseline—which I use freely when the child's head is on the perineum, externally as well as internally. If the carbolized cream is used for this purpose the patient is sure to complain severely of burning and smarting in the passage after delivery.

5. A tube of corrosive sublimate.

6. A three pint *douche* can.

7. A half gallon glass stoppered bottle, empty, labeled "corrosive sublimate solution, 1 : 1,000," to be used with an equal part of hot water as a lotion.

8. An eight ounce bottle of Calvert's No. 2 carbolic acid, liquified, labeled : To make, with a gallon of water, a lotion of 1 : 20.

The author goes on to say : I am strongly of the opinion that midwifery should be more in the hands of midwives and less in the charge of medical men. The loss of time in watching the first stage of labor is deplorable. One woman may unnecessarily absorb the whole attention of a busy doctor when the lives of others may be sacrificed by his absence. On the occasion of the birth of George IV. the queen was delivered by Mrs. Stevens. Queen Victoria was brought into the world by a midwife, as were all the children of George III.

"The Microbes of Erysipelas and Puerperal Fever" was the subject of a report by M. Doyen of Reims, at the French Academy of Medicine, at their seance, March 18 last (*Le Journal des Debats*, March 15). He has made very interesting experiments in the culture of the microbes of puerperal fever abscesses from streptococci. All the cultures have resemblance. He found in all the same pyogenic striptoccus. The inoculations of the cultures in white rabbits produce distinct

symptoms. The cultivation of these microbes proves to him that an erysipelas gives an erysipelas, that a puerperal fever gives generally an erysipelas of great gravity. The culture of the pyogenic streptococcus, on the contrary, has always produced small abscesses. He concluded that puerperal fever sometimes occurs in consequence of the invasions of the organism by the microbe of erysipelas.

Professor Lusk, the eminent New York obstetrician, was elected foreign corresponding member of the Paris Academy of Medicine at the meeting of March 13, 1888.

Hysterectomy was discussed at the late congress of French surgeons at Paris. MM. Pean, Richelot, Pozzi of Paris and Demons of Bordeaux spoke on the subject. Demons and Pozzi were in favor of the ligature of the broad ligament. They thought the use of the clamps for controlling hemorrhage should be made a matter of choice, not an invariable rule. MM. Pean and Richelot, who both claim the invention of this clamp, defended its use in all cases.

"Purulent Puerperal Peritonitis, with Puncture and Evacuation of 5.5 Litres of Pus, Followed by Recovery," is the title of a very interesting paper by Besnier, in *Union Médicale*, No. 64. The reported case was one in which the puncture was made where puerperal peritonitis had been followed by encapsulation of the pus and recovery from the immediate disease. He strongly advocated the necessity of surgical interference in such cases. In this instance the puncture was made two months after the delivery and the above-mentioned large quantity of pus evacuated. The results were most encouraging.

REPORT ON PROGRESS IN OPHTHALMOLOGY.*

BY A. R. BAKER, CLEVELAND, O.

OPHTHALMIA NEONATORUM.

As to the etiology and treatment of this disease, there is the most complete unanimity of opinion among all writers of the year. Discharges from the os or vagina gain access to the child's eyes and set up the purulent inflammatory process. The treatment consists simply of clearing away the discharges and destroying what may be left behind.

The result of modern treatment of this disease is the most gratifying in the history of medicine.

There are three hundred thousand blind people in Europe. Between thirty and fifty per cent. of these owe their terrible misfortune to this, a wholly preventable disease.

TORTICOLLIS.

Dr. Bradford (a general practitioner) reports a curious case of *torticollis*. It was finally discovered that the head was held to one side in order to secure binocular or better vision. I have met several similar cases. One, a young man who underwent an operation for the cure of the wry-neck, with the effect of making him see double. He had paralysis of the superior oblique.

DISEASE OF THE EYES DUE TO NASAL TROUBLE.

Considerable attention has been given to this subject during the past year.

The connection between the ear and the naso-pharyngeal cavity has been sufficiently dwelt upon in all works on diseases of the ear, but the connection between eye diseases and nasal affections have been almost entirely overlooked.

Thomson has reported four cases and has since seen another of periodical conjunctivitis, characterized by the formation of granules and follicles, which trouble always

* Read before the Cuyahoga County Medical society.

recedes in the winter to reappear in the summer. In two of these cases a diagnosis of hay fever has since been made. Another case was treated for trachoma by a number of specialists, but the history of the case showed that the affection was of nasal origin. Martin says the epistaxis of school children is often due to eye-strain in astigmatic children.

Gradle has cured epiphora, with no stricture of the duct, by simple treatment of the nose. Also case of asthenopic exophthalmus, etc. Schmidt Rimpler had a case of complete permanent binocular blindness, following a nasal operation for the removal of polypi. Dr. Clark of Columbus read an interesting report of a case of eye disease as the result of nasal trouble at the recent meeting of the Ohio State Medical society.

SPRING CATARRH—"PINK EYE."

Schmeichler observes that the exacerbations of this curious affection take place in warm and dry weather, and, conversely, in wet and cold seasons it disappears. It is, therefore, a disease of spring only in so far as the season is warm and dry. If cool and wet, it does not put in an appearance until summer. Köningstein concurs in this experience.

The symptomatology of this disease differs with us widely from that described by continental writers. According to these observers, this disease is very rebellious to treatment, resisting alike astringents and caustics. In my experience with this disease, I have found it to be a much milder disease and much more amenable to treatment than the descriptions given us by continental writers would lead us to believe. I have found that it yielded to mild solutions of boracic acid frequently instilled in the eyes. There is not much pain usually, but when it is present, cocaine gives great relief. It is usually necessary to order colored spectacles.

Although occurring most frequently in the spring, I am inclined to believe that it is due to a specific contagion, carried from one person to another by means of towels, etc.,

and not due to climatic cause. It is a subject needing careful investigation, as it has received but little attention from writers in this country.

CONVERGENT STABISMUS.

Is the ambylopia of the squinting eye the cause or the effect of the squint? The weight of opinion seems to be that the theory of Donders is in the main true. The squint depends upon hypermetropia and the interdependence of accommodation and convergence; the ambylopia is the result of disuse, psychical exclusion or suppression.

The leader of the opposition is Schweiger. He thinks the ambylopia is monocular and congenital, or that it precedes and is one of the, if not the sole cause of the squint. Cuignet sadly misunderstands or misrepresents Donders' theory, and brings forward the strange theory that the child conceals the squinting eye beneath the internal angle and under the shadows of the nose and brow because of photophobia. A "reflex" exercised by the defective eye is juggled with.

The strongest argument brought against the views of Donders is, that all children are hypermetropic, and, consequently, the connection between hypermetropia and squint is not so evident as heretofore supposed. There are several answers to this observation. There is, undoubtedly, a difference in individuals: some are able to exercise greater accommodation with less convergence than others; they have more "play" in this respect and are able to resist the tendency to squint. It has also been shown that the average amount of hypermetropia is much greater in squinting than non-squinting children. Mr. Frost finds in his own practice that hypermetropia under 1 D., which is common in children, is seldom associated with squint. A majority of his strabismus cases had a refraction of over 2 or 3 D. of hypermetropia, and over ten per cent. had H. of over 6 D. Mr. Snell's cases of squint averaged over 4.25 D. of hypermetropia. Landolt quotes the following conclusive experi-

ment as proving that hypermetropia has a tendency to produce a squint :

"If we possess binocular vision, let us fix a near object, cover one eye—the left, for instance—and place a concave glass before the right. This eye will not change its direction, but will continue to see clearly. But the effort of accommodation, which it is forced to make in order to neutralize the negative glass, imposes itself at the same time on the other eye, and provokes in the latter a converging strabismus of a degree corresponding to the power of the concave glass. The existence of this strabismus may be easily established objectively, and manifests itself subjectively by a homonymus diplopia at the moment when the diaphragm is removed from in front of the left eye."

It is certainly a matter of almost every-day experience with practical ophthalmic surgeons, that the correction of the ametropia is frequently all that is necessary to cure the squint. Patients or their friends notice the reappearance of the squint the moment the glasses are laid aside.

This discussion has a very decided bearing upon the question of the treatment of squint. I meet doctors all over the country who do not know the difference between a hypermetropic and a myopic astigmatism ; in fact, men who do not possess an ophthalmoscope or trial lenses, and who would not know what to do with them if they had them ; who say, "I make no pretensions to treat eye disease, except of the most trivial character, such as cases of granular lids and such simple operations as to cure strabismus."

When I answer such remarks by saying that there is no other subject requiring so much judgment and knowledge in the entire field of ophthalmology as that required for treating cross eyes intelligently and successfully, I generally lose such little reputation as I may have as an oculist. It is a much more difficult question to decide than the question of an operation for cataract.

Operations for strabismus are made much less frequently than formerly. If cases are seen early, it may be a question whether it is ever necessary to make an operation.

consecutive cases relief of the ocular strain relieved the headache in 83.6 per cent., improved it in 12.4 per cent., but failed in four per cent. (?)

In a study of one hundred and sixty-two cases, whose histories could be traced, Amidon deduces the following conclusions:

1. Patients in whom insufficiency of the internal recti exist are very apt to suffer from sensory disturbances in the occiput, nucha, shoulder and back.

2. Patients in whom insufficiency of the other recti exist do not appear to be subject to occipital disturbances, but from vertigo, diplopia and confusion.

3. In hypermetropia and hypermetropic astigmatism, the most frequent complaint is of frontal headache.

4. In myopic and mixed astigmatism, frontal, temporal and general headache are about equally common.

5. In cases combining hypermetropia and myopia with presbyopia, frontal, temporal and occipital headaches and vertigo are present in about equal proportions.

6. In pure myopia and presbyopia, nervous symptoms are seldom present.

Of one thousand cases of refractive error, Bickerton found that in two hundred and seventy-seven headache was a distinct symptom.

Ranney describes three or four cases of sick headache relieved by correction of the eye strain, and makes the remarkable statement that he has yet to meet a case of typical migraine in which a marked error of refraction or a serious muscular anomaly of the orbit did not exist.

Speaking of the growing recklessness of assault upon the ocular muscles, which is now so fashionable, Thomson very pertinently remarks that the affections to which these muscles are peculiarly liable are, in the vast majority of cases, but secondary and symptomatic of lesions that are often distant, almost always mysterious and, above all, changeable. Experience teaches us more and more plainly that these delicate structures have to bear the brunt of a derouted reflex neurosis; that their enervation may, in multitudinous

ways, he interrupted by pathological conditions in the course of the nerve or at its nuclear origin.

The considerate neurologist and physician looks behind these external symptoms to the things they point out, and he seeks the uncorrected ametropia, the reflex neurosis, the meningitis, the syphilitic, gouty or rheumatic virus, the blood or nerve poison, the kidney or spinal disorder that lies beneath. Tenotomy cannot cure the amenorrhœa that causes ptosis or diplopia; it is powerless over the hyperopia that we have so often seen produce persistent headaches and neuralgias, possibly even choreas and epilepsies; if syphilis be the 'father of insufficiency,' surgery is not needed. And so through the list! Those who have most profoundly studied the almost impenetrable problems presented by the ocular muscles come to recognize that, however grows our knowledge, the wisest knows but a few of the mysteries of their pathological functions. These may all be truisms, trite as they are true; but there seems a dangerous tendency to ignore or forget them."

[Form 2]

INDIGESTION.

BY JAMES U. BARNHILL, M. D., ADJUNCT PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS IN COLUMBUS MEDICAL COLLEGE, COLUMBUS, OHIO.

Perfection of life in the animal organism depends upon digestion, absorption, assimilation and elimination, a series of processes so closely associated that disturbance of one results in the derangement of the others.

“The least confusion but in one, not all,
That system only, but the whole must fall.”

Cell functions of assimilation, secretion, excretion and reproduction, accompanied by the wondrous phenomenon of the transformation of inorganic into vitalized organic matter, are dependent upon the general circulation. The blood is the supply stream of nutrient material for constructive metabolism and energy, and the efferent channel for the elimination of waste products.

Digestion, which is intimately connected with nutrition, is the process by which organic substances are rendered diffusible through the membranes of the body and soluble in its fluids. It differs from fermentation in the nature of its ferments and in the character of the processes which they effect. Digestion is essentially a process of hydration under the catalytic action of *unorganized solvents*, or enzymes, while fermentation is decomposition by the action of *organized ferments*.

DIGESTIVE PROCESSES.

In normal digestion, ptyaline, and amyllopsin which acts much more energetically, convert starch and amyloids into glucose, maltose and dextrine. The diastatic ferment of the bile transforms starch, in small quantity, into sugar, and the invertin of the *succus entericus* converts saccharose into invert sugar, which is a mixture of laevulose and grape sugar, and continues the diastatic action begun

by other ferments by converting maltose into dextrose (Bernard). These hydrolytic ferments require alkaline solutions to render them active, but saliva will act slightly in weak acid solutions. Pepsin and the trypsin of the pancreatic juice transform proteids into soluble albumens or peptones and parapeptones. Stearpin of the pancreatic juice, assisted slightly by the bile salts, splits up the fats into fatty acids and glycerine and emulsionizes those not thus decomposed. Seven or more hydrolytic enzymes are engaged in effecting the subgastric conversion of food into chyme, while throughout the alimentary canal digestion in one part is supplemented by that in another. Maltose of ptyaline digestion is converted into dextrose by invertin. The intestinal fluid, acting but slightly upon raw albumens (Kühne), further digests them after they have been submitted to the action of pancreatin, and acts upon propeptones, peptones and parapeptones—the products of gastric proteolysis. By prolonged action, gastric juice reduces peptones to leucin and tyrosin. The alkaline saliva, by its influence upon osmosis, excites the secretion of gastric solvents, and the hydrochloric acid of the gastric secretion facilitates intestinal absorption and stimulates the secretion of pancreatic juice and bile, while the bile facilitates absorption, stimulates the musculature of the intestine and prevents decomposition. It is seen, therefore, that digestion is not simply a series of separated processes, but a succession of component functions.

The secreting cells undergo important histological changes during rest and activity. During rest the mucous membrane is *pale* and *anæmic*, while during activity it is *richly supplied with blood*. The cells themselves, when inactive, are “clear,” with but few granules and shriveled nuclei; when active they become granular; some diminish in size, others (the chief peptic cells) enlarge, “the hyaline substance increases” and the “frame-work of living protoplasm grows” (Langley). As digestion proceeds, the soluble products are absorbed *pari passu*, the

blood becomes *richer in nutritive material*, and, returning to the secreting glands, reinvigorates them, and they in turn elaborate and secrete an *increased quantity* of digestive fluids. Thus healthful digestion increases the digestive powers, while its derangement impoverishes the blood and further enfeebles digestive processes. Health begets health. It might be said that *dantur salus nulli nunc nisi sanis*.

Indigestion expresses a true condition and designates an affection which is accompanied by a great variety of symptoms and morbid phenomena. The frequency of its occurrence, the amount of suffering and incapacity for work which it entails, and the perversion of vital processes which it occasions, certainly entitle the subject to consideration. Departures from normal conditions are more frequent in connection with digestion than with any other function of the body, yet we are content with but a limited understanding of these disorders, and practice more empiricism in the treatment of them than in that of any other class of ailments. The following remark calls attention to the importance of the subject: "Very much more than half the patients we lose," says Thomas King Chambers, "die from imperfect nutrition, and very much more than half of those that recover gain that end by chanced or designed restoration of their *digestive functions*."

EVIL SEQUENCES.

Slight attacks of indigestion may be of little consequence, yet we should remember that derangement of digestion, however slight, *always impairs nutrition*, and that when associated with grave diseases, it invariably *hastens their progress* and may be the source of death. Deficiency of nutrition, local or general, indicates lowered vitality and (germs *post hoc vel propter hoc*) is the initiative step in the invasion of all morbid processes. The following, abridged from Landois and Chossat, are some of the phenomena of impaired nutrition or inanition: Dryness of the mouth, *cessation of digestive secretions*, walls of

alimentary canal anæmic and thin, less albumen in the plasma, cardiac pulsations and respirations fewer, phosphoric and sulphuric acids in the urine, muscular weakness and depression, serous effusions, œdema, thickening of epithelium and destruction of mucous membranes, discoloration of viscera and skin, loss of weight, producing death when it reaches four-tenths of the normal, limited power of resistance of cold, softening of tissues, diarrhœa, hectic fever, convulsions or coma, and death. Chossat adds to the three modes of deaths by the brain, lungs and heart, a fourth—by inanition. A state of deranged digestion perpetuates itself by aggravating the causative conditions. It reacts upon the nervous system and depresses vital functions; the ingesta distend or press upon the stomach walls and render them anæmic and arrest their normal movements; the products of fermentation and putrefaction, which soon succeed arrested digestion, pervert secretions and induce nausea, vomiting, headache, gastritis, dilatation, ulceration, or other structural changes in the membranes of the stomach, and, by their absorption, vitiate the blood. In the indigestion of “bilious attacks,” it is ptomaines rather than bile that causes the vomiting, and thus prevents physiological processes. We are familiar with the depressing influence that deranged digestion has upon the mind, producing melancholy and moroseness, upon the heart’s action and *circulation*, thus interfering with *absorption*, *metabolism* and *elimination*, and how it may disturb the respiration and functions of excretory organs. The Greeks seem to have seen “through a glass” albeit darkly, as they gave the name *melancholia* (black bile) to depression of spirits, associated with indigestion and hepatic disorders; but modern science, discerning more clearly, “joins hands with this ancient notion” in the explanation that in certain forms of indigestion, biliary salts often collect in the blood, and by their action on nerve centres produce mental depression. In a case of indigestion reported by Dr. Ewald, marsh gas, a product of putrefaction in the

bowel, issued from the mouth and took fire as the man was lighting a cigar. Sulphureted hydrogen produced by fermentive changes in the stomach may produce weak pulse, giddiness and collapse. Excess of lactic, acetic or butyric acids arrests the action of the digestive ferments, while these and other acid products of fermentation give the blood and excretions an acrid character. The *languor* and *faintness* occurring in persons of feeble digestion about four hours after meals result from the poisonous action of fermentive or putrefactive products, *i. e.*, ptomaines; while the intense headache which many dyspeptics suffer, especially in the morning upon rising, is doubtless due to the same cause. Much of the cephalalgia accompanying gastric derangement seems, however, to result from disturbances in the cerebral circulation. Defective digestion causes crapulous and lenteric diarrhœas, and not infrequently induces or abets constipation. Peptones unmodified by trypsin or the liver, injected into the general circulation of a dog, depress the heart's action, arrest the renal excretion, and, in large quantity, produce a soporose condition, convulsions and death (Mühlheim). In health, the peptones, sugars and other products of digestion and ptomaines in small quantity undergo important transformations in the liver, by which they are rendered toxically inert, or otherwise suitable for appropriation to tissue growth, and the gastric, pancreatic and intestinal juices that have escaped destruction within the alimentary canal, contribute to the formation of glycogen. But in deranged digestion, functions are so impaired, proteolysis and amyolysis so imperfect, and ptomaines so numerous, that, instead of being thus destroyed in the intestines or changed in the liver, they pass on in excess from the portal into the general circulation, exerting their poisonous influences upon the blood, nervous system and excretory organs.

Since some of these ferments are active in alkaline media, it is obvious they will have a deleterious influence upon the constituents of the blood.

In consequence, the liver is congested, albumens and sugars overtax the kidney and acrid products irritate the skin. These conditions become important factors in the ætiology of disease. Nitrogenized food, imperfectly assimilated, favors the development of gout, or by increasing the amount of excretory matter, as urea and lithates, induces Bright's disease. It is well known that various forms of skin disease, as acne, urticaria and eczema, are traceable to derangements of digestion and assimilation. In bra-dyspepsia an animal diet will produce the lithic acid diathesis, and hydrocarbons, especially sugar, will always hasten the progress of diabetes mellitus, and, in persons with an hereditary predisposition to the disease, may be the *origo mali*.

CAUSATION.

Dietetic errors, such as irregularity of meals, imperfect mastication, which, it has been tritely remarked, has become a lost art, the taking of unsuitable and improperly prepared food, gluttony and the drinking of too much tea, coffee or other fluid while eating, are some of the direct causes of impaired digestion. Besides checking the secretion of saliva and diluting the digestive solvents in the stomach, as all fluids do when taken in large quantity with food, tea, by the action of its tonic acid, hardens the albumen and gelatine of meats and renders them quite indigestible. Fasting *debilitates the secreting glands* by disuse, *exhausts the system* and leads to excesses after prolonged abstemiousness. Tobacco and alcohol are fruitful sources of indigestion, the former by nervous disturbances and waste of saliva, the latter by the precipitation of the hydrolytic ferments and the production of gastric catarrh. Imperfect formation of solvents, physical inactivity or violent exertion; mental influences, as study, anxiety and emotions; neurasthænia, nervous irritability, torpidity, paralysis or hyperkinesis of the musculature of the digestive tract; organic diseases of parts intimately connected with digestive processes; general

debility and febrile diseases, are potential factors in deranging digestion. An enfeebled circulation, directly or indirectly, is the chief source of functional indigestion. It permits waste products to collect in the tissues and interfere with nutritive changes; it absorbs but imperfectly the already digested proteids, as osmosis and diffusion are proportioned to the activity of the blood current, while those remaining concentrate the fluid, limit molecular mobility and interfere with the action of the hydrolytic ferments. Through impoverishment of the blood the secreting glands are deprived of the necessary material for the elaboration of the needed digestive solvents, as albumens for pepsin, zymogen for trypsin or sodium chloride for hydrochloric acid. A rapid and copious blood supply favors all secretions and vital processes. The acids of fermentation and products of putrefactive changes impede or arrest digestion. While these products check digestion hydration, it should be remembered that fermentation processes in the stomach or small bowel are only rendered possible, at least to the extent of being deleterious, by an absence of the normal quantity (relative to the amount of ingesta) of the digestive solvents. Hydrochloric acid (0.2 per cent.) or pepsin (0.3 per cent.) in solution in the proportions in which they are found in normal digestion, singly or in combination, will *prevent the action of organized ferments*.

TREATMENT.

In ordinary cases the object of treatment should be, as Dr. Pavy remarks, "to raise the digestive capacity to the level of digesting requisite food rather than to reduce the regimen to an adjustment with a low standard of digestive power;" it is obvious that when the affection is due to structural changes, the success of any treatment will depend upon their recognition and proper management. Dietetic errors should be avoided, psychical causes removed, moral and hygienic regulations imposed. But notwithstanding moral treatment and dissertations upon dietetic improprieties, however well directed, the calls of duty,

pleasure, ambition and appetite will overtax some part of the organism, and the complex functions of digestion will suffer frequent derangements. Treatment should be based upon pathological conditions and departures from the type of physiological action, and directed upon the suggestions of healthful functions.

In rare cases choice of food stuffs, special regulations or predigested aliment may, for a time, be advisable ; as in the feeble digestion of phthisis, debility and convalescence. But in purely functional indigestion, ordinary food under the guidance of appetite, irrespective of preconceived notions that certain articles would not be agreeable, should be taken in moderate quantity and with scrupulous regularity. After having digested its contents, the stomach should have short periods of rest before food is again introduced. Long intervals of rest, however, divert the circulation and enfeeble the secreting cells. If tardy digestion be due to constipation or torpidity of the liver, these causes should be removed ; if to diminished peristalsis in the alimentary tract, appropriate treatment should be adopted for its restoration ; if to nervous conditions, they should be the objects of attention, or if it be occasioned by general debility, appropriate restoratives must be administered. If we conclude that, as the digestive secretions are inadequate, digestion may be restored by addressing stimulant treatment to the secreting cells, we shall be disappointed. It is not so much stimulation as it is nutrition that these cells need. In the majority of cases that apply for treatment there is a condition of incapacity and suffering from which they seek relief, or there is, at intervals, a recurrence of a similar condition which they hope to avert.

The dual character of digestion, vital and chemical, must at all times be recognized. Functions of the organism cannot long be operative without the chemical processes of digestion, and the chemical processes are wholly dependent upon these functions. In arrested digestion both factors are practically inoperative, one for the want

of *nutriment in the blood*, the other for want of digestive solvents. The fact that we can supply the deficient element to the one, and cannot do so directly to the other, indicates what must be regarded as *rational treatment*.

Much confusion and ill-directed treatment arise from doubt as to which element of the digestive fluid in a given case is deficient. Fermentation of the ingesta is ordinarily evidence of the deficiency of *both* hydrochloric acid and pepsin; either, in the proportion in which they are found in the gastric juice during healthful digestion, will, as has been already stated, prevent fermentive changes. These changes may be recognized by the eructations, or by means of the syphon, and may be regarded, when coming on several hours after eating, as evidence of deficiency of both these ingredients. In very rare cases only, there may be hyperacidity from hydrochloric acid, never giving rise, however, *per se*, to *tardy digestion* or *eructations*; but it may cause gastralgia in hyperæsthesia of the stomach, or of irritability of the mucous membrane from long exposure to its action. In a series of cases examined by Dr. Van Norden, he reports that in those in which hydrochloric acid was in excess, digestion of albuminoids was rapid and complete, and that there was *no heartburn* nor other *discomfiture*. In cancer of the stomach hydrochloric acid is said to be greatly diminished or absent. Deficiency of hydrochloric acid or of pepsin may be determined by removing a portion of the ingesta and applying tests, or by administering a few tentative doses of one or the other ingredient. It may be borne in mind that the *proportions* in which these elements may be combined, in order to insure digestion, *are no invariable*, and that the *rapidity* of the *digestive processes* is proportioned, within certain limits, to the *quantity of the digestive solvents*. A considerable increase of either, or both, will, as I have demonstrated by experiment, hasten the digestive process.

When putrefactive changes, as evidenced by the eructations, have been considerable, doubtless the best course is

to empty the stomach by the syphon or an emetic. But in tardy or arrested digestion, accompanied by but slight fermentive changes, as an *expedient* to remove this state of incapacity and suffering, which often lasts for one, two or three days, with poisoning and starving and pain and positive injury to the digestive organs, I am persuaded that there is a better way than to use the emetic or syphon; and better too than attempting to "fast it off," for such material has been known to remain two weeks in the stomach. This prolonged state of indigestion has already impoverished the blood, checked nutrition and *held digestive processes in abeyance*, as the blood can not furnish material from which the secreting glands may elaborate digestive solvents. At the beginning of the process of digestion, as experimentation has shown, the gastric juice is *secreted but slowly*; but as the digested material *is absorbed*, the secreting cells pour forth an *abundance* of digestive fluid. And Heidenhain demonstrated that the local secretion, excited by the mechanical stimulus of the ingesta, is slight compared to the general secretion depending on absorption of digested material. Would it not be better, instead of summarily removing this promised nutriment and further impoverishing the blood by delay, to *assist nature* at the point where she is weakest, to perform this task with which she is discouraged, than to remind her so forcibly of her incompetency? Emetics are revolting and injurious. They empty the stomach, but not by aiding physiological action. They derange rather than assist function. Aside from its moral effect, the use of the stomach tube is not free from objections. Two deaths are reported as having occurred from its use. Yet some of our text-books recommend its employment with the assurance that patients will learn to use it themselves. For purely functional indigestion this practice is to be condemned, and purgatives should be avoided. From the difference in action of certain drugs, as creosote, thymol or salicylic acid, on formed and unformed ferments, we may, by their use, check fermen-

tation without interfering with digestion. In tardy gastric secretion, if these fermentive processes be prevented for a time, digestion is rendered possible without further assistance. If fermentation has begun, it should be thus arrested and its acid products neutralized by an alkali, as magnesian carbonate or sulphite of soda. If the cells are then unable to furnish the necessary digestive fluids, shall they be told to starve a little longer that they may gain more strength? or shall we not rather treat their arrested function as we would failing respiration—sustain it, if may be, by arousing residual energy; if not, then sustain it artificially, in the one case until the blood is supplied with oxygen and the respiratory centre stimulated, in the other until the *blood is enriched* with nutritive material from which the eccritic cells may secrete the *needed digestive solvents*? Residual energy may be aroused by massage, friction and warmth over the epigastrium. They improve the circulation and increase muscular activity. Instinct teaches the lower animals to coil the body upon the abdominal viscera that they may be kept warm and richly supplied with blood during the digestive process. Nature places the infant, while nursing the mother's breast, in the best possible position to secure warmth to the stomach and speedy digestion and absorption. These results may, in a measure, be secured by occasional counter irritation with strong mustard plasters over the stomach. Commonplace as this may be, it aids function and is often a most effectual remedy. A capsine or weak mustard plaster worn over the epigastrium for a week or more will secure a more abundant and active blood supply and the digestive apparatus will grow stronger.

If these means fail to restore the physio-chemical processes, let digestive elements of the best quality, proportioned to supply the deficiencies, be administered, and thus secure rapid and complete digestion of the food within the alimentary tract. You will have given the patient the sense of comfort that accompanies rapid digestion, instead of the distress and ill effects of pro-

longed indigestion, or the prostration of the emetic; you will have enriched blood, returning secretions and the vigor of restored nutrition, in lieu of impoverished blood, deranged functions and lowered vitality. If there be acidity, let it be neutralized, and ten or fifteen grains of pure pepsin, or from five to twelve minims of the normal acid of digestion, one or both, as may be required, which will prevent further fermentation, be administered, and ordinarily the headache and gastralgia will disappear, a sense of comfort in the epigastrium will ensue, and the dyspeptic will be ready for his next meal, with his digestive organs and whole system reënforced through an enriched blood by the nutritive material of his previous repast. It is *improbable* that there are any more toxic products absorbed under this treatment than there would be from the residue remaining after an emetic, while practically there are *no evidences of deleterious* results from this source. To recommend the subject to fast off his indigestion, or to follow a dallying treatment with comparatively inert saccharated pepsins, or to attempt to purge away the ingesta that is yet in the stomach, either of these courses is irrational and pernicious. Neither the emetic, nor the syphon, nor the fasting, nor the purge, aid in themselves to restore function. They are *reversive and privative processes*, with only this argument in their favor, that they empty the stomach and give it rest. But they do this at a great sacrifice of vital energy; besides, it is not rest the stomach or secreting glands need; it is nutrition and nutritive blood supply. It is as if we should withdraw the air from the lungs in respiratory dyspnœa with the view of giving them rest and restoring respiration. The administration of digestive solvents does not, as some assume, interfere with, nor relieve, the function of the secreting cells. During the whole process of normal digestion, the *eccritic glands continue to pour forth their secretions*, even after the saturation of the ingesta, compensating for their escape with the chyme, and the neutralization of the acid by the saliva, their maximum

amount often reaching *considerably beyond* the proportions necessary to secure ordinarily active digestion, excess of the solvents only *rendering the hydrolysis* more rapid and complete. The activity of the secretions does not depend upon the amount of pepsin and hydrochloric acid in the stomach (at least until they reach proportions considerably in excess of the normal), but, as already remarked, upon the presence of food in the stomach, the integrity of the secreting cells, and an abundant and nutritious blood supply. Hence administration of hydrolytic solvents in arrested digestion, instead of *relieving secreting glands*, enables them to *resume their functions*, and they do resume them. Long continued use of these agents will be unnecessary, as they aid in restoring the autonomy of normal digestion. This temporary restoration of function, which has been accomplished along the line of physiological processes, should be supplemented by general tonics and special treatment, as the conditions of the case may require.

Intestinal digestion is very complicated, being effected by many complex agencies, modified by the functions of various organs and obscured by anatomical relations. But its derangement, independent of gastric disturbances or organic diseases, is comparatively rare. When it is due to diminution of pancreatic secretion, temporary benefit, awaiting the restoration of the action of the pancreas by appropriate treatment, may be derived from the employment of its chief ingredients, trypsin, amylopsin and sodic carbonate, administered near the completion of gastric digestion. When it results from impaired peristalsis or exalted muscular activity of the bowel, diminished intestinal or hepatic secretions, or sluggish portal circulation, the therapeutic corollary would be to direct treatment to the removal of these conditions. With healthy gastric digestion, the pancreatic juice, rich in its digestive solvents, will rarely be found inadequate to its important work.

ANTISEPTICS IN MIDWIFERY.*

[REPORTED BY L. B. TUCKERMAN, M. D., CLEVELAND, OHIO.]

Dr. Jones occupied the chair, and called on Dr. Preston to open the discussion, who said that he did not believe in the excessive antiseptic precautions advocated by so many. They seemed to him entirely unnatural. He believed fully in cleanliness, but from what he had read he had come to the conclusion that serious mischief and a good many deaths had resulted from a reckless use of solutions of bichloride of mercury.

Dr. Herrick said that as to the question under discussion—the use of antiseptics in midwifery—it is one theory to use them to prevent putrefaction and quite another to destroy germs. In his opinion the etiology of puerperal fever was still a theory only. In 1858 they discussed this question in the French academy, and opinion was divided, one portion holding that it was an essential fever, the other holding that it always originated by infection. When the microscopists came on the stage they saw the bacteria, and jumped at the conclusion that they had found the cause. His own theory was that it was the combined effect of an external agent and the condition of the patient's system. Infectious material must find its way into the system either through the veins or the lymphatics. The sharp rigor indicates that necrotic material has passed into the system through a denuded surface. Nature has its own way of protecting these denuded surfaces, viz.: by discharges pouring outwards. In his opinion these antiseptic injections poured into the genital tract were interfering with the course of nature, viz.: the outward current of the discharges. Cleanliness is all-important. The condition of the system must be carefully looked into. He detailed a case of a primipara who was confined in an eight by ten feet room in which there was a base-burner, and adjoining which was a bath-room and water-

* Discussion at the August meeting of the Cuyahoga County Medical Society.

closet. The labor was natural ; there was no laceration of the parts ; but they failed to carry out his instructions with regard to ventilation, and the third day she had a rigor. He attributed this to the bad ventilation. Under unhygienic conditions there may enough effete material accumulate in the blood itself to cause fever. Cleanliness, pure air, cautious feeding and attention to the secretions generally, were, in his judgment, the course best calculated to give the patient the best chance of a good getting up.

Dr. Sihler said that he held himself responsible only to keep himself thoroughly clean. He used antiseptics moderately when occasion arose in the course of the case. He kept himself aseptic, and made but few examinations. Animals had no need of antiseptic pads—they were not fingered. As there was a natural coating to protect tree buds from being blasted by the germs that were floating in the atmosphere, so he believed nature did something to protect animals during parturition. Using antiseptics too freely, he believed, might do harm. The main point was clean fingers.

Dr. Powell said that it was easier to be dogmatic than to be correct. If statistics were of any value, they showed that there was a specific germ that produces puerperal fever—that the fever is specific and the germ essential. I believe the germ to be identical with that which produces surgical septicæmia. He did not include under the term puerperal fever such accidents as the rupture of a pyosalpynx or the fevers that come from abrasions. He quoted the classic cases of Semelweiss, where, after the students had been obliged to thoroughly disinfect themselves, the mortality in the lying-in wards to which they had access fell from ten and a half to one and a half per cent. He thought that the rich man's daughter was more in danger from a physician who did not believe in the germ theory than the wife of the poor man was from the necessarily unsanitary condition of her surroundings.

Some questions were raised by Drs. Vance, Dutton and others with regard to some remarks which he (Dr. Powell) had previously made in the society, as to the medico-legal aspects of this question. They had understood the speaker

to state that no man need call on him (Dr. Powell) as a witness in defence in a case of malpractice charged where puerperal fever had resulted, unless the practitioner had used antiseptic injections. The speaker wished to state that he had been misunderstood. The point to which he attached the greatest importance was thorough disinfection of the hands. The fact that animals escaped brought out this point more forcibly. He never allowed a woman to be touched unless the hands were thoroughly scoured, and as a lubricant he used bichloridized vaseline. He rarely used injections after delivery—gets better results without. In the maternity department of Charity hospital there had been two hundred and thirty births with three deaths from puerperal fever, and during this time a hundred students, who were also pursuing their anatomical studies, were given practical instruction in midwifery.

Dr. Hart recalled vividly the teaching of Drs. Gordon and Meigs, and the injunction of the latter to “bleed, bleed her to death.” He recalled an epidemic in the early years of his practice where they were accustomed to follow out that injunction to the letter, bleeding as high as forty ounces. They knew of no antiseptics in those days. Latterly he had seen but little puerperal fever. When a case occurred, he was in the habit of reducing temperature by powerful cardiac sedatives. He believed in the moderate and wise use of antiseptics in all cases where one has reason to suspect putrefactive changes. In a majority of the cases of primiparæ, injury of the genital tract takes place, but the puerperal fever occurs only under rare and exceptional circumstances. If the fever be due to the injury, how do any escape?

Dr. Vance said that it was highly necessary to be cautious in drawing sweeping inferences from statistics. Traumatism of the vagina with septicæmia, resulting from the absorption of decomposing material, would account for these cases. Wounded surfaces drawn cleanly and snugly together healed at once; but if a pocket were left, there would be decomposing material in it, and these products in contact with

denuded surfaces would be absorbed. The cryptogamic vegetation in the pocket would be the same as in healthy discharges. The thing to be done was to keep the injured parts in the best sanitary condition.

The speaker wished to know how it was that if puerperal fever came by the touch of the *accoucheur* in a herd of Jersey cows, if one aborted she would die of puerperal fever and the rest of the herd would likewise abort and die; there certainly was no touch to communicate the fever in that case. As to the fact, he could vouch—he had once invested in Jersey stock with the aforesaid result.

When an epidemic of puerperal fever occurred in Bellevue hospital in the days when Drs. Fordyce Barker, Elliott and Isaac E. Taylor were in charge, the two former would withdraw and call on the latter. Dr. Taylor would take charge of the fever cases in the hospital and of the immense outside obstetrical practice that he had among the best families of New York city, and he never was known to carry the fever. He was accustomed to say that you couldn't carry the fever if you kept yourself clean.

Dr. Dutton said that he had no theory of puerperal fever or of bacteriology. We have seen very little of puerperal fever in private practice, though, until recently, nothing had been done in the antiseptic line. If it be of bacterial origin, why does not the whole animal creation have it as frequently as the human animal? If dirt causes it, why do not those women who live habitually in extreme poverty and uncleanness suffer from it more frequently? As a matter of fact, puerperal fever is quite as likely to occur in good families as in poor. In the opinion of the speaker, septicæmia had not received any more satisfactory definition than puerperal fever. It is probable that full statistics would show a greater ratio of deaths from the use of antiseptics to the number of cases in which they had been used than is the ratio of deaths from puerperal fever to the whole number of confinements. What this fever is, is still an unsettled question. It is undoubted that it shows a marked similarity to surgical fever. The speaker was ready to accept any theory that would explain

the facts observed at the bedside. The objection to adopting the bacterial theory, unless this theory be absolutely true, is that the means of prevention and cure of puerperal fever, if this disease is due to other causes, will be overlooked or ignored, and the patient may die for want of proper treatment.

Dr. Hanson thought an immense amount of damage had resulted from washing out the uterus, with a view of preventing fever, when it ought not to have been done. If there were stinking pus, it should be washed out.

The president said, in conclusion, that he had seen but little of puerperal fever of late. A number of years ago it had followed the late Dr. Ruggles of Newburgh around in his practice. The latter had a number of cases, almost all of which were fatal. To the question whether any cause were known why Dr. R. should be thus unfortunate, Dr. Jones replied that there was no cause known.

CORRESPONDENCE.

A MEDICO-LEGAL SOCIETY.

[We take great pleasure in publishing the following correspondence, which will explain itself, and we earnestly hope may result in the formation of a Medico-Legal society.—Eds. MEDICAL GAZETTE.]

CLEVELAND, September 15, 1888.

J. J. ELWELL, Esq. :

Dear Sir—I have been asked if I would favor the organization of a State Medico-Legal society. I will do what I can for that purpose if a sufficient number of legal and medical gentlemen of standing and reputation can be secured to give the organization a reasonable prospect of success and permanency. What think you of the matter? If the subject can be brought before our professions in such a way as to elicit interest in it, I believe great good may be done.

The two professions ought to be brought closer together for the discussion of medico-legal questions, that both may become better informed on them. As it is now, many times in court lawyers make a contest between medical witnesses, often in consequence of opinions illy considered or ignorantly expressed. On the other hand, the lawyer frequently fails to do the best thing for his client in consequence of not being well informed on questions in hand.

I have known wrong judicial opinions rendered in consequence of bad testimony. This is apt to be so in cases in which the competency of a person to do business or to make a will is concerned.

We might profitably have a local society of this character for the scientific consideration of questions in medical jurisprudence and medico-legal subjects. This organization could probably be made a section of the County Medical society.

If this meets your approbation, let me hear from you as to what, how and when.

Respectfully,

W. J. SCOTT.

REPLY.

CLEVELAND, O., September 17, 1888.

Professor W. J. SCOTT:

My Dear Sir—An efficient organization of the kind you suggest would undoubtedly tend greatly to awake an interest in medico-legal subjects, a matter too much neglected not only by the legal fraternity but by the medical profession. Very few medical colleges have a thorough course of medico-legal lectures in this country.

What may be accomplished by such a society as you propose is illustrated by the work of the New York Medico-Legal society, under the very able leadership of Clark Bell, esq., of that city, who is an able lawyer and president of the society. He has drawn into the work the strongest attorneys of the city, such as David Dudley Fields and Austin Abbott; so of the medical men, Fordyce Barker, Dr. Doremus and others equally noted. They meet regularly; their discussions are full of interest and instruction over the papers read before the society. These papers, or many of them, are printed in the Medico-Legal Journal, edited by Mr. Bell and published quarterly. These papers are also printed in book form, and constitute five or six volumes of fresh medico-legal matter from the ablest members of both professions. I take the journal and receive these volumes as they are printed, and read and study them with great interest and profit.

Your organization might not accomplish as much as that of New York, but it would be in the same direction. The only difficulty I see in making the enterprise a success, is that *someone* and not everybody will have to do a great deal of work and take a deep and working interest in the matter. I will gladly lend a helping hand, but I do not see my way

clearly to promise a very great deal of hard work, which will devolve, as I have said, upon somebody in particular. Go ahead and arouse an interest in the matter—it is an important and needed work.

Yours truly,

J. J. ELWELL.

Dr. A. Y. P. Garnett died July 11, aged sixty-eight years. During the Civil war Dr. Garnett served as a surgeon in the Confederate army, and was the physician of Jefferson Davis, General Lee and most if not all the cabinet officers of the Confederacy. After the close of the war he returned to Washington. His was largely a consultation practice, as his opinion was always highly esteemed by his colleagues. Dr. Garnett's labor in making the Ninth International Medical congress a success will long be remembered, and his urgent plea for a higher standard of medical education at the last meeting of the American Medical association was a fitting close to his eventful career as a typical American physician.

Dr. Horace A. Ackley.—We intend to publish a fine steel engraving of this brilliant though erratic surgeon in our November number. As this is the first number of Volume IV., it will serve as an admirable frontispiece.

The death of the voluminous contributor to the medical periodicals, Dr. J. Milner Fothergill, occurred recently in London. He was a very corpulent man, and the cause of his death is said to have been diabetes. His work will be greatly missed.

Professor Herbert Foote, who formerly held the chair of chemistry in the medical department of Wooster university, died suddenly at his home, recently, of apoplexy. At the time of his death he held the position of professor of chemistry in the Cleveland Central High school.

The Cleveland Medical Gazette.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY

ONE DOLLAR PER ANNUM IN ADVANCE.

Vol. III. begins with November, 1887. Subscriptions can begin at any time.

REMITTANCE OF MONEY.—All money should be sent by P. O. Order, Postal Note or Registered letter, addressed to the CLEVELAND MEDICAL GAZETTE, 143 Euclid Avenue, Cleveland, Ohio. In no case should money be sent by check, except on New York or this city.

Original Communications, reports of cases and local news of general medical interest are solicited. All communications should be accompanied by the name of the writer, not necessarily for publication.

All letters and communications should be addressed to the CLEVELAND MEDICAL GAZETTE, No. 143 Euclid Avenue, CLEVELAND, OHIO.

Changes for advertisements must reach us not later than the second week of the month to be corrected in current number, addressed to W. N. GATES, Manager Advertising Department, 10 Public Square.

EDITED BY A. R. BAKER AND S. W. KELLEY.

EDITORIAL.

MEDICAL EDUCATION.

The signs of the time point to an era of a higher standard of medical education in this country. Since our editorial on this subject a few months ago, incidental to the news of the obligatory three years' course at the Western Reserve Medical College, the Announcement of the College of Physicians and Surgeons in New York has been received. In the future this college will require a preliminary examination and a three years' graded course. Jefferson Medical College of Philadelphia requires a three years' course also. This was only done after the alumni of the college passed a resolution, declaring that they would withdraw their entire support and influence from the college, unless a higher standard of medical education was adopted. The Medico-Chirurgical College of Philadelphia, we are glad to note, has returned to the three years' course first adopted.

Other medical colleges announce that after the session of 1888-89, they will adopt a three years' course.

The states of Illinois, Wisconsin and California have adopted laws preventing physicians locating or practicing in the three respective states who have not attended at least three full courses of lectures.

Virginia, through her admirable medical examining board, is leaving out all incompetent physicians who attempt to practice in the state. Other states are following in the same line.

The profession who have talked and resolved and urged and coaxed and threatened the medical colleges during the past fifty years, to stop pouring out every year a horde of incompetent practitioners, seem to have decided to act at last, and we shall undoubtedly see something tangible effected within the next few years.

The sooner the medical colleges all recognize this fact, and fall into line and elevate their requirements for graduation in accordance with the requirements of the age and the demands of the profession, the better for all concerned.

AMERICAN SOCIETY FOR THE ADVANCEMENT OF SCIENCE.

The recent meeting of this society in the Central High School building of this city was an event long to be remembered by every lover of science. Although few of the medical profession of this city took an active part in the proceedings of the society, we noticed quite a sprinkling of them in attendance upon the various sections. Especially the section on anthropology seemed to have great attractions for the medical men, and, indeed, it could scarcely be otherwise when such men as Dr. D. G. Brinton of Philadelphia, and Dr. Frank Baker of Washington, so well and favorably known by the profession, were present and actively engaged in the work of the section.

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EVERY MEMBER OF WHICH
WEARS AN ARTIFICIAL LEG.

MANUFACTURE

ADJUSTABLE LACING

SOCKET LIMBS,

THE MOST COMFORTABLE AND
DURABLE LIMB, AND THE
NEAREST APPROACH TO
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BER OF ANY IN-
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We are authorized to make limbs for soldiers on Government orders. Write for catalogue, which gives a full description of these legs, with numerous certificates from persons using them. When patrons cannot visit our establishment, we forward blanks to take measures.

Artificial Limb Manufacturing Co.,

No. 909 Penn Avenue,

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The most Compact Thirty-Minim Syringe Made

Case of metal, handsomely embossed and nickel-plated, as shown in cut, actual size.

The barrel is of metal, formed by a process securing uniformity of caliber, without soldered joint or seam. It is plated inside and out with nickel. The piston is packed in the double parachute form, with leather prepared for the purpose. It retains its elasticity, operates smoothly, resists all tendency of fluid to pass above as of air below it. An engraved scale upon the piston-rod indicates minims, thirty being its capacity. It has two needles of refined steel, carefully tempered.

Price, \$3.33, less 25 per cent. to physicians, or net \$2.50. Postage, 3 cents.

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HYPODERMIC SYRINGES

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PROMPTLY REPAIRED.

Our Hypodermic Syringes have for years had the highest reputation.

Codman & Shurtleff,

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CODMAN & SHURTLEFF,
BOSTON.

The Sub-Committee of Dietetics

—ON—

Infant Feeding,

AT THE

American Medical Association, May 9, 1888,

Recommended a formula for an Infants' Food as a very efficient substitute for mothers' milk. This formula closely resembles that of CARNRICK'S FOOD, and no other prepared food in the market can claim a like resemblance.

THE FORMULAS.

Formula recommended by the
Sub-Committee on Infant
Feeding, as above stated.

Desiccated partly peptonized milk in the form of a milk-food, containing partly converted starch (soluble starch or dextrin) and a small quantity of lactose is a convenient and (when well-made) a very efficient substitute for mothers' milk.



Formula for Carnrick's Food.

Evaporated or desiccated milk, partly peptonized and thoroughly sterilized by heat, 45 parts.

Dextrin, Soluble Starch and Milk Sugar, 55 parts.

This forms a fine dry powder, which will keep in any climate, and only requires the addition of water to render it a suitable nutrient for infants, or adults whose digestive powers have become impaired.

Carnrick's Food contains about five per cent. of fat. This is the largest amount possible to combine in a stable preparation presented in a powdered form. In cases where a larger amount of fat is desirable, a small quantity of cream may be added.

We do not claim this food to be "a PERFECT substitute for human milk."
But we do claim that

CARNRICK'S FOOD APPROACHES NEARER TO HUMAN MILK IN
CONSTITUENTS AND DIGESTIBILITY THAN ANY OTHER PRE-
PARED FOOD THAT HAS EVER BEEN PRODUCED,

and that it is the only infants' food that will, without the addition of cows' milk, thoroughly nourish a child from its birth.

We believe that CARNRICK'S FOOD solves the problem of a reliable substitute for human milk. The Casein of cows' milk, by partial predigestion with freshly made Pancreatine, is rendered as easily digestible by the infant as human milk, and, by thorough sterilization with heat, made aseptic, thus avoiding the objection to the use of milk foods in Cholera Infantum.

Full information regarding the process of manufacture will be cheerfully furnished and samples sent free to those who wish to test CARNRICK'S FOOD.

REED & CARNRICK,
NEW YORK.

NEW BOOKS.

'DISEASES OF WOMEN: PATHOLOGY, DIAGNOSIS AND TREATMENT.' By Grailey Hewitt, M. D., London, F. R. C. P., Professor of Midwifery and Diseases of Women, University College, and Obstetric Physician to the Hospital, &c., &c. A new American from the fourth revised and enlarged London edition, with 236 illustrations. Edited with notes and additions by H. Marion Sims, M. D., New York. E. B. Treat, Publisher, 771 Broadway, New York.

The many Americans who met Grailey Hewitt at the International congress at Washington last year, agree with those who have seen him surrounded by students and patients at the University College and Hospital in London that he is a man of very superior wisdom. That he should lend himself to the writing of books on the diseases of women is a matter of the greatest good fortune for that part of the medical profession which interests itself in gynecology. The book of this distinguished author has some points of peculiar interest. We have great stress laid on the importance of better nutrition. The mechanical pathology of some forms of uterine diseases is advocated, viz., that pathological changes are produced by mechanical causes. A considerable number of new illustrations have been added; the wood-cuts representing flexions and displacements of the uterus are drawn life size, and the various mechanical appliances for their treatment are drawn the actual size of the instruments, with the view of rendering the descriptions and directions for treatment more explicit and less liable to misinterpretation by the beginner. The author is a well-known authority on hyperemesis gravidarum, and his words on this subject have a special worth. He compliments the investigations of our fellow-citizen, Engleman, very much in this direction. The author considers the effects of mechanical treatment, which is not necessarily the application of instruments, in relieving this vomiting of pregnancy to be very remarkable. In the milder varieties, the horizontal position is sufficient to give relief, but when the uterus is markedly flexed, this is not sufficient, for some cases require the dorsal

position anteflexion, and some the prone, as retroflexion. In really severe cases position is hardly sufficient, but we must use internal mechanical treatment, by which the cessation of the sickness, or its speedy amelioration, is generally speedily obtained. From the reason of the influence of flexions on the vomiting of pregnancy, this subject receives considerable attention.

The nature of hysteria and hystero-epilepsy, a very interesting subject, has occupied his attention. There appear to be two classes of cases—one in which the attacks are introduced primarily by some sudden or strong emotion, the other where the attacks are induced primarily by a reflex disturbance from within. The second class is numerically far more frequent than the first. It includes those cases where the hysterical manifestations are severe and more or less constantly liable to occur. During his investigations into the etiology of the trouble, he became convinced that the uterus is generally in a state of irritation, thus confirming the more ancient theory on the subject. He demonstrates that hysteria in all its protean forms is a uterine reflex symptom, dependent always on flexion or malposition; and that to remedy the latter is to cure the former. This freeing of hysteria from the influence of the ovaries is a matter of the greatest importance in this day, when the rising gynecologist removes the ovary with that savage delight which would characterize a Sioux Indian. Chronic starvation is made to play an important role in the alterations of the shape and position of the uterus. In fact, he thinks these conditions are seldom noticed except in individuals whose general health has become seriously impaired by taking too little food.

E. S. M.

NOTES AND COMMENTS.

Christian science is not, as some suppose, a new affection, but a mongrel, a pschychoneurosis, produced by a cross between the superstitions of the dark ages and some of the neuroses of advanced civilization. The pedigree of this promising hybrid is not yet fully made out, but is generally thought to be the result of union between Witchcraft and Spiritualism, as it more nearly resembles this than any of the kindred affections, though it at times simulates hysteria, melancholia and various other forms of mental aberration. Generally speaking, it adopts the material part of spiritualism and the superstitions of witchcraft; they discard the herbs and poisons of witchcraft, but hold fast to the incantations and supernatural powers. The priesthood is delegated to "healers," who have inherited the craft and cunning of the hag and the itching palm of the medium. Like witchcraft, Christian science is largely confined to women, about eighty-five per cent. being females. The movement will, doubtless, result in much good—to the managers of private asylums and sanitariums.—*Progress.*

Between the male and female there exist differences so radical—mental, physical and moral—as to be patent to the most superficial observer. It is the supremest folly to imagine that men and women are constitutionally fitted for a unity of occupation. When the dream of enthusiasts is realized, women will cease to be women in all those endowments which confer on them grace and dignity of character.—D. HAYES AGNEW.

Professor Gubler's formula for hypodermatic use of quinine :

R Quinia hydrobromate	.	.	.	gr. xlviij.
Aquæ destillat	.	.	.	3iv.

M and dissolve if necessary by heat.

Sig : twenty minims contain four grains.

According to Dr. Thomas J. Moore, it should invariably be used as an indispensable factor in establishing reaction from shock. These injections of twenty minims each will usually be required for the first administration, to be followed in the next twenty or thirty minutes by a corresponding amount. We have had trouble in using this preparation for the reason that the quinia would only remain dissolved while the solution was heated, and while being used would cool and clog the needle.

Mississippi Valley Medical Association.—This association will meet in Pickwick theatre, Jefferson and Washington avenues, in St. Louis, September 25, 26 and 27, 1888, two weeks later than first announced.

This date was selected in order that the cheap railway rates during the carnival season of St. Louis might be made available.

The programme is perfected, and the entire time of the meetings from 9:30 A. M. to 5:30 P. M., each day, will be taken up with strong papers and full and free discussions, there being nothing in the way of extraordinary or irrelevant business, all such matters being settled by committees, without discussion. The three evenings will be consumed by public and private entertainments, and each and every delegate may be assured that constant efforts will be made in the direction of catering to his comfort and enjoyment.

The sentiment animating the committee of arrangements and officers of the association in planning this meeting, has been to provide for good, solid, scientific work while the sun shines, and at night let recreative effort and pleasure reign.

All physicians west of the Alleghany mountains are invited to become members, eligible to membership under the following from the constitution: "Article III. Membership in this association shall be limited to those members of the profession of medicine who acknowledge allegiance to the American Medical association by signing its code of ethics. No individual who shall be under sentence of expulsion, suspension or disability, from any recognized state, county,

district or local medical society, shall be eligible to membership in this association until said disability shall have been removed. All applications for membership shall be referred to the committee on credentials. The annual dues shall be \$3, payable in advance."

For further information, address I. N. LOVE, M. D.,
Chairman Committee Arrangements,
Lindell and Grand aves., St. Louis.

The Seventh Annual Announcement of the New York Polyclinic and Hospital, a clinical school for graduates in medicine and surgery, has been received. The class for the session of 1887-88 numbered three hundred and thirty-seven, an increase of thirty-six over the preceding year.

The changes in the faculty are the appointments of Dr. Henry N. Heineman, professor of general medicine, and Dr. Charles Stedman Bull, professor of ophthalmology.

The New York Polyclinic hospital will be opened in October. The preliminary term begins September 17, and the regular term on September 24.

Dr. Kohler, the discoverer of the anæsthetic properties of cocaine, has removed from Vienna to New York. Had he patented his discovery, he would by this time have been able to accumulate a fortune sufficient to enable him to wait an indefinite time for a practice in his new home. Perhaps, though, his fame as the discoverer may assist him to an immediately lucrative practice(?)—*American Practitioner and News*.

Dr. B. W. Holliday, who was recently thrown from his carriage, sustaining a broken clavicle, together with a couple of broken ribs and other injuries, we are pleased to learn is rapidly convalescing.

Dr. H. W. Kitchen, for many years professor of anatomy in the medical department of Western Reserve university, left for Europe on the tenth. During his absence the chair will be filled by Professor Laisy.

Professor E. W. Morley has resigned the chair of chemistry in medical department of Western Reserve university. His successor has not yet been appointed. Professor Smith of the Case School of Applied Science will fill his place for the present.

Among the numerous visitors in Cleveland during the state conclave of Knights Templars, we were pleased to note Dr. and Mrs. D. N. Kinsman of Columbus. Dr. Kinsman is no stranger to the readers of the GAZETTE.

Mr. Huntington, who formerly made a donation to the physiological laboratory of the medical department of Western Reserve University, has recently given an additional \$1,000 for the same purpose.

READING NOTICES.

MIDSUMMER VOYAGES ON THE NORTHERN SEAS.—This is a beautiful little pamphlet issued by the Detroit & Cleveland Steam Navigation Co. Anyone contemplating a short vacation ought to address T. F. Newman, general agent, Cleveland, O., and secure one of these pamphlets, in which all necessary information as to expense, time, etc., may be obtained. Dr. Mills, once post surgeon at Mackinac, says: “No better place can be found for sickly girls and puny boys, for worn-out men and women, whether from overworked brain or muscle, or for those inclined to hypochondria. A change from the tiresome sameness of home scenes cannot fail to benefit all. From the hour of entering Lake Huron, your feelings will indicate that you have passed beyond the reign of miasma, fever, dyspepsia, blue devils and duns, and you look back upon the whole of them with gay indifference, or a feeling of good-natured contempt, as every turn of the steamer’s wheel carries you farther into the temperate and genial climate of the lakes, and away from your perplexities. Under these influences real diseases may abate, and the imaginary ones be forgotten.

WHAT COCAINE TO USE.—There are many brands of Cocaine in the market, and many physicians have found to their annoyance that some are inert and some very irritating when applied to a sensitive membrane.

It may, therefore, be of service to physicians to learn the experience of Dr. Dudley S. Reynolds, editor of *Progress*, who in the July, '88, number expresses himself in this wise:

“The medical profession has about settled its estimate of the therapeutical value of muriate of cocaine, but it is, unhappily, no easy matter to decide upon the most uniformly reliable source of supply. The editor of *Progress* had about

[Form 4.]

concluded Merck's was the only reliable product, when recently he was induced to make trial of that produced by Parke, Davis & Co. A fresh sample of ten grains was dissolved in five drachms of distilled water, to which was added one drop of liquid carbolic acid. One drop of this instilled into the eye of a man from whose cornea a foreign body was to be removed, produced complete anæsthesia in three minutes, so that incision of the inflamed cornea, and turning out of the piece of offending metal, was not felt by the patient. Twenty other similar experiments yielded similar results."

DR. T. R. DICE, Utica, Missouri, says:—"I beg leave to state that I am well satisfied with the use of crystalline phosphate. I regard it as an improvement upon the liquid preparations in the market. Crystalline phosphate is convenient to dispense, pleasant to the most fastidious taste, elegant in appearance and decidedly in combination with *nux vomica*. The best tonic I ever prescribed in atonic conditions of the stomach."

W. H. SCHIEFFELIN & COMPANY are the sole agents for the United States for the new antipyretic *phenacetine-bayer*. It is claimed that, in relatively small doses, it never fails to have an antipyretic effect, and that it is not followed by the disagreeable symptoms, such as nausea, vomiting or cyanosis, often observed after the use of other antipyretics.

— THE —
Cleveland Medical Gazette.

VOL. III.

OCTOBER, 1888.

No. 12.

ORIGINAL ARTICLES.

ADDRESS DELIVERED AT THE OPENING OF
SESSION 1888-89 OF THE MEDICAL DE-
PARTMENT OF THE WESTERN RESERVE
UNIVERSITY.

BY HUNTER H. POWELL, M. D., PROFESSOR OF OBSTETRICS AND
DISEASES OF CHILDREN.

GENTLEMEN:

In the history of institutions as in the lives of men, events arise from time to time, which, on account of their great influence for weal or woe, assume the importance of epochs. The inauguration of session 1888-89 of this time-honored school will in the future be memorable, because of the radical change made this year in the system of instruction. I refer to the obligatory three years' graded course. For almost half a century medical instruction has been given upon the site we now occupy. During all these years about three thousand young men have obtained their medical education here. Here was the temple of Æsculapius for the pioneers of the Western Reserve. In the comparatively simple ways of our distinguished predecessors the science of

medicine was taught, the healing art imparted, the lame were made to walk, the blind to see, the bloom of health brought back to faded cheeks. With the advances made in the various departments of medicine, this school has endeavored, to the best of its ability, to march "*pari passu.*" Its influence has continued to be felt in a more and more extended circle. But it is with peculiar pleasure the faculty contemplate the advance step taken towards higher medical education, in the required three years' graded course. This is not an experiment with us. We are fully committed; there will be no retreat; we have burned the bridge behind us. Having had for a few years past a voluntary three years' graded course, we have learned by experience its true value; we have learned, I may say, its necessity. Its adoption by all the schools in a few years is unquestionable. All medical teachers acknowledge its value; the profession at large demands the change; in a few years state boards of examiners everywhere will require it. Were we not moved to make this progressive movement for the good reasons already assigned, there is another quite sufficient to have actuated us. Who can look upon this grand and costly building dedicated to medical teaching, the munificent gift of a single philanthropic citizen to suffering humanity, without in his heart experiencing a high degree of pleasure that such a man has been given to the community. A man who was thoughtful and far-sighted enough to step aside from the well-beaten paths of philanthropy, and grasp the plan of promoting the welfare of his fellow-men by giving them physicians as skilled in the science of medicine, as thoroughly instructed in all the departments of medicine, as can be accomplished—does not a faculty honored with such a trust, owe something to such a man and to those whom he desired to be the beneficiaries of his life's work? There can be but one answer to this query. It is a sacred trust! May wisdom be granted to those in whose charge it is placed, to so act that self-interest may never intrude into their councils, but ever be subservient to suffering humanity.

It is my purpose to occupy the short time I am expected

to detain you in the presentation of some general statements bearing upon medical study and practice, rather than discuss at length a single topic. I do this with the hope that at least some one or more things may be brought to your knowledge which may prove of benefit to you. It unfortunately too frequently happens that medical students get most of their good advice at the close of their college career, rather than at the beginning of it. This is undoubtedly an error. For many of you this morning all is before you. This is *the* important day for you, rather than the day upon which you will receive your diploma. Would that I could make you fully realize this fact? Your cerebral convolutions this morning present, as it were, clean surfaces for impressions. How diligently and accurately will you store their cells with the all-important facts necessary to an understanding of the science and art of medicine? Do you commence this course with a thorough appreciation of what you propose undertaking? If not, let me ask each and every one to stop and consider the matter to-day. Do not wait until the coveted diploma has been received, and you are suddenly confronted with an appalling sense of responsibility and bereft of the blessed confidence which knowledge affords. Think for a moment of what is required of the modern physician. How rapidly facts have been accumulating. How whole departments have been created since the days of our fathers. What a category of ologies, what numerous instruments of precision to be mastered, what demands will be made upon you in the domain of preventive medicine! What rapacious microbes claim recognition as potent causes of disease, beckoning on investigations into the yet unfruitful field of etiology! What preliminary training have you had to prepare you for the work before you? Fully one-half of our class depend upon teachers' certificates for admittance, when they matriculate with us; a very small percentage have had college training. In very many cases the training which comes from teaching, coupled with natural ability, fully prepares a man to undertake the mastery of any profession. It is, however, equally true that many

teachers' certificates are obtained, especially in portions of this state, upon extremely limited acquirements. So long, therefore, as it is possible for such an one to obtain admission, it is highly necessary for the faculty to see to it that the following couplet shall not be applied to one of our alumni:

In vain his drugs, as well as birch, he tried,
His boys grew blockheads, and his patients died.

Those of you who have obtained the advantages of a college education have studied the accessory sciences, if I may be allowed the expression, and have entered upon your medical career with the knowledge of how to study, have an immense advantage over your less fortunate fellows, and yet it is possible that some members of the former class will be distanced by some members of the latter. Natural ability, with perseverance, good health and good habits, have enabled their possessors in all times to win laurels in science, art and literature. Superior education will tell in whatever occupation a man may follow, not even excepting bull-fighting. Mazzantini, the most noted bull-fighter of Spain, is a bachelor of arts. Fully appreciating the importance for all medical colleges to have a high standard, both as regards preliminary requirements and final examinations, I am satisfied that many opinions on this subject, which have come of late from visionary reformers, are simply impractical and ridiculous.

What motive has actuated you to begin the study of medicine? Are you simply seeking what you hope may prove a lucrative trade, or have you been enticed by what has seemed the fascinations of the study and practice of medicine? Before going any further, remember it has been truthfully said of medicine: "It is the vilest of trades, though the noblest of professions." If there is one among your number who has decided to become a doctor under the impression that you are to fill a long-felt want, please reconsider, or at least consider a few things carefully. The ratio of doctors to population in this country is now 1 to 580. We lose by death about eighteen hundred; we graduate about four

thousand annually. There is not a country on earth that can make such a showing as this ; so far as numbers are concerned, we excel the world, although, at this time, a plethora of doctors is complained of in many of the most civilized countries of the world. This is especially so in Germany and Spain. It is barely possible the majority of the hundred and twenty-six colleges in this country have been doing for doctors about what the potato is said by a malicious English writer to have done for the Irish people—"increased their quantity without improving their quality." No, there is no long-felt want for any one of you, and, unless it is your purpose to become something more than an average man, you are positively not needed anywhere in America ; the market is flooded with such doctors. The country is overrun with poor, cheap doctors ; that is, if poor doctors are ever cheap—they come high at any price to the man who employs them. There is no use disguising the fact, gentlemen ; unless you each and every one desire to become something more than an average doctor, and carry out your decision, it would be far better for you, the profession, and the public generally, if you will at this hour step down and out, take up the birch again, return to the plow, the shop or the counter. The world is growing more critical every day concerning medical men, and you may rest assured by the time you are ready to practice you will be weighed quite accurately ; mysterious looks and nods, powdered wigs and knee-breeches, gold-headed canes, all have had their day. The world demands scientific attainments for permanent success, and the world is getting very fast to know the difference between *quasi* and real science. You must not stake chances on luck in the competition you will enter ; your only hope will be in superior skill and acquirements ; with these, in spite of superfluous numbers, success will be yours sooner or later. It is but kindness to sound a warning to-day, so that time and money may not be wasted, so that being forewarned you may be forearmed for the future struggle, and, perhaps, represent the survival of the fittest.

Sir Andrew Clark, one of the most learned and distin-

guished physicians of England, lately remarked: "I worked twelve years for bread, twelve years for butter and twelve years for the luxuries of life." (A few weeks ago Sir Andrew received a fee of about three thousand dollars.) In this country there have been many counterparts of Sir Andrew Clark. If you have chosen the medical profession with the idea that it is a sure and speedy path to wealth, let me disabuse your minds. The number of medical men who amass wealth is exceedingly small. If you will look about you you will find that, as a rule, the wealthy doctors have either inherited their wealth or made it in speculation. Since the development of specialties, a wealthy doctor, who has made his fortune by his practice, is occasionally met with; but I hope all of you do not expect to become specialists. If you realize more than a competency from your practice you will be one of the exceptional ones. If you have taken up medicine for revenue only, let me say to you—Don't. But perhaps it is not wealth you are seeking, but ease? You have given teaching, farming, merchandise and perhaps other occupations trials and have decided that they are all too laborious for you. You want a *profession*, and the medical profession has seemed to you a very genteel and easy way of making a living. Ask the statistician if the practice of medicine is conducive to old age. Ask the life insurance companies what their records show on this point. If you know a very old doctor enquire of him if his pathway has been strewn with flowers or with thorns; whether he has, for the most part, had but little care and anxiety, lost but few hours of sleep, and had his comfortable meals with regularity. He may have been fond of society, or literature, or art, or travel. Ascertain how much time he has had for these pleasures. If I am not very much in error, there is no occupation (I make no exception) so exacting in its demands upon its followers as the medical profession. Mentally and physically the doctor is overtaxed as few men in the community are. His time, his talent and his temper are constantly under tribute; his courage, both moral and physical, needs be above standard to meet the demands upon it. As the pilot calmly directs the boat through dan-

gerous rapids, whilst passengers tremble with fear, so the physician must meet every emergency with cool head and steady hand ; with unwavering confidence born of knowledge. It is for him to guide the precious bark committed to his charge. Can human heart resist such ceaseless tension ? Does the daily contact with the shadow of death give buoyancy to spirit or elasticity to the step ? No. Let me advise you to halt if you expect to find either wealth or length of days in the medical profession. Look elsewhere for a flowery bed of ease. Perhaps, however, neither desire for wealth or ease has induced you to take up this calling, but glory, gratitude, the praise and flattery of your fellow-men. These, you think, must inevitably be showered upon the followers of a profession the objects of which are so beneficent in character ; we do not wonder that the ancient Egyptians and Grecians considered its origin divine. Let my gray-haired colleagues answer. Has aught else than gratitude been bestowed upon you for work well done ? When, after a long and weary battle with the king of terrors, your zeal and skill have triumphed, have grateful hearts always crowned you with laurel wreaths, or have thorns of base ingratitude pricked to the quick ? Have you never been the object of envy, hatred and malice ? Has calumny never assailed you ? Is my eminent and skillful friend certain the woman whose life he saved a year ago did not say of him yesterday, " I would not let him treat my sick cat ? " Does the proverbially fickle public except the doctor ? Are allowances made for the failures of an inexact science ? Have ignorance, superstition and quackery never contributed to make your life a burden ? Time would fail me were I to attempt to elaborate this topic. The hints suggested briefly must suffice.

I have attempted, gentlemen, in a few moments to picture to you some of the burdens you may have to bear, some of the hindrances you may be called upon to overcome. Do not believe me a pessimist. I will have you look upon the bright side of the picture. If you have come up here well prepared for the task you have undertaken, fully aware of the responsibilities you purpose assuming, with determina-

tion to practice the necessary self-denial, believing that the "noblest study of mankind is man;" if you wish a pursuit that will develop the best traits of your character and demand the constant exercise of every talent you possess, you have chosen wisely. Goethe says: "It is only with renunciation, life properly speaking, can be said to begin." If this be true, this day will be the dawn of life to many of you. Sunshine and shadow will be portioned you no matter what walk you may choose through life. If you consecrate yourself to the work, if you come under its fascinations, you will have a happy life. With philosophic bearing you will enjoy the sunlight more because of the shadows. If it is true that you have received undeserved censure, ask yourselves how much undeserved praise has been bestowed upon you. Ingratitude will be lost upon you because of the ennobling pleasure with which you will receive the incense of grateful hearts. What matters it if your life goes out a little early from too rapid and intense burning, have you not restored joy to some mother's heart when the dying babe responded to your skill? Have you not been the humble instrument of staving off poverty and distress by saving the life of father or mother. Go on! Give up a few years of your life, as your illustrious predecessors have done, and thereby added ten years of life to the average age of their fellow-men. Go on! Do not be deterred from the battle you must needs fight with ignorance and superstition; you have a duty to perform; superstition is the natural child of ignorance, and it is for you to hasten on the millennium by dissipating ignorance, by spreading abroad the light. Science, twin sister of religion, must go hand and hand, and it is for you to teach the masses. When the benign sway of science and truth is universal, then indeed the battle will be over, the victory won. Go on! Pathies and isms and ologies, instituted by his satanic majesty, are antagonizing the science of medicine and consigning thousands of your fellow-men to untimely graves. Witches you have not, for they have been burned; spooks you have not, for they have been punctured; but their modern representatives are numerous and lively—"Faith

Curers," Christian Scientists," "Occult Telegraphers." Not satisfied with the transcendental absurdities of homeopathy, these have come at the bidding of a superstitious, mystery loving people to fill the void created by the burned witches and the punctured spooks. The China Medical Missionary Journal says: "In a temple outside of the city gates of Pekin is to be found a brass mule of life size supposed to have wonderful healing properties. Patients suffering with diseases of every kind seek this mule to obtain a cure. The process is delightfully simple. For instance, you are suffering from sciatica; you go with all speed to the temple, locate the part of the brass mule corresponding to your painful region; you first rub the mule a certain number of times and then apply friction with the same hand over the disabled member, and behold the pain is gone. The animal, it is said, is patched in all directions with fresh pieces of brass to cover the holes produced by the constant friction of eager patients. Do you laugh at this display of ignorance and superstition on the part of the heathen Chinese? Restrain your laughter, my friends, until you have commenced the practice of your profession in any part of this God-favored land. Would you believe it, you will find the devotees of the brass mule wherever you go. To be sure, you must expect to find the mule has assumed other shapes and is known by other names. Equip yourselves whilst you may with the torch of science, that with your advance the mysterious and wonderful may become clear and more limited, and that nature may yield to your researches her secrets hitherto unfathomable. It should be an occasion of thankfulness that since your inclinations have decided you to enter upon the study of medicine your judgment has guided you in the way of scientific, rational medicine; that, unlike the followers of sects and pathies, stamped with their various trade-marks, you will be confined by no narrow boundaries or limited resources. The earth, the air, the waters upon and beneath the earth, contain nothing you are forbidden to employ, which experience has approved or may approve. The followers of legitimate medicine alone have made the science of medi-

cine. Their claim with truth every great man who has appeared in the history of medicine, every discovery pertaining to the healing art which has redounded to the welfare of mankind. It will be your proud privilege to become the legitimate heirs of the recorded achievements of the fathers of medicine. With so rich an inheritance, may we not hope for you a future big with benefits for humanity?

SENILE HYPERTROPHY OF THE PROSTATE AND ITS RESULTS.

BY A. R. SMART, M. D., TOLEDO, O.

A peculiar enlargement, known as hypertrophy, occurs in men after fifty-five or sixty, in about the proportion of one in three. The enlargement is a senile change. Although an homologous growth, the enlargement is not a true hypertrophy, as it affects often only portions of the gland. Sir Henry Thompson found out of one hundred and twenty-three cases, seventy-four of general enlargement; in nineteen cases, both lateral and median lobes enlarged, but most in median. In five cases only was the enlargement confined to the lateral lobes. To what cause this senile change is due, is not settled. It is not an inflammatory change. The growth consists chiefly of increase in muscular tissue and incidentally of gland structure. Sir Charles Bell believed the hypertrophy to be caused by any source of irritation which caused frequent contractions of the organ. Others regard it as a senile change akin to arcus seniles and arterial degeneration. Thompson regards the prostate as an analogue of the uterus and possessing the same tendency to develop homologous growths—this tendency existing in the female between the ages of thirty-five and fifty, and showing itself in uterine hypertrophy or tumor, and in the male between ages of fifty and seventy, showing a tendency to similar formations in the prostate. That portion of the gland which exhibits the closest analogy to the uterus, viz. :

the so-called median lobe, is the part most liable to these disorders. Reginald Harrison recently endeavors to establish the theory that prostatic enlargement is a result and not a cause of retention and bladder disease. He says from various causes the trigone or least muscular part of the bladder becomes weakened and depressed in form and allows a little urine to remain. This excites repeated efforts of the adjacent muscles to expel the residual urine. Thus the median portion of the prostate, and ultimately its entire muscular structure, become hypertrophied. This does not account for those cases where the hypertrophy is not confined to the muscular structure, nor to the development of new growths. If this was the chief cause, it might be expected in obstructive disease of the urethra, as stricture, when the muscles of the bladder make prolonged and violent efforts to empty it; and yet, as is well known, prostatic enlargement is not a constant or common result. Billroth says the so-called hypertrophy of the prostate is never connected with the formation of new gland tissue, but depends upon the diffuse or nodular form of myoma. Dr. Gross shares this view. It will be seen that the enlargement may occur from different forms of disordered nutrition. There may be hyperplasia of either the stromal or gland elements, or both, constituting true hypertrophy, or the development of a new homologous growth identical with the uterine myoma, or so-called fibroid. The hyperplasia of the gland element is similar in character to the adenoma of the mammary gland. The favorite locality of these nodular forms of myoma is in the posterior and upper portion of the gland, the so-called third lobe. A reciprocal heredity between uterine myoma and prostatic hypertrophy has been observed—prostatic enlargement in the father predisposing the daughter to uterine myoma, and myomatous uterine growth in the mother disposing the son to prostatic hypertrophy. It would be interesting to know, in this connection, whether the Negro race, in whom uterine myoma are very rare, are equally exempt

from prostatic hypertrophy. This type of diseased nutrition is not wholly confined to old age. Dr. Mudd of St. Louis found a myomatous tumor in prostate of a boy thirteen months old. It was connected with the median lobe and had caused retention. The fact that myomatous growths occur with equal if not greater frequency in single women would seem to indicate that sexual activity had but little influence in developing prostatic hypertrophy. It is no doubt an inherent tendency in the structure—that is, the prime etiological factor aided by any cause that induces congestion and flow of blood to the parts. Enlargement of the prostate is not so important in itself as in its results. The obstruction to the outflow of the urine, and the consequent disease of the urinary tract posterior to the obstruction, are the important features. A marked degree of enlargement may exist without inducing symptoms that attract attention. Mercier says fifty per cent. of men above fifty have prostatic hypertrophy, but of these only about seven per cent. suffer pronounced symptoms. The enlargement does not of necessity cause pain even during urination. The degree of induration dependent on the development of connective or fibrous tissue, or the presence of inflammation—often a result of improper instrumentation—have more to do with causing pain than mere swelling. The prostatic urethra is changed in character in all cases of enlargement, but the degree of obstruction depends upon the locality and nature of the enlargement. The length of the prostatic urethra is always increased, often doubled—a fact to be borne in mind when a catheter is needed. This may not involve much hindrance to the outflow of urine. If the lateral lobes are mainly the seat of the enlargement, the urethra, though elongated and narrowed, is increased in vertical diameter and no considerable obstruction exists. If one lobe is involved, the urethra will be turned to one side; when the median lobe is involved, more interference with the egress of urine is found, but even here it is not always marked. The floor of the urethra is pushed up-

ward in this form of enlargement, and when combined and continuous with enlargement of one of the lateral lobes, the urethra may become very tortuous and curved, both laterally and upward. The same is true when circumscribed masses jut out into the canal from the floor of the prostatic urethra. The obstruction is specially great when the middle lobe at its posterior portion juts upward and partially closes the urethral orifice. An examination per rectum will not always indicate the degree of obstruction; the enlargement may be eccentric and not obstruct the vesical orifice to any considerable degree. Again, but little swelling may be found in the rectum and much hindrance exist at the urethral entrance, because the swelling or hypertrophy is centric. Belfield reports a case of myoma of the middle lobe as large as a hazel-nut, occurring in a man seventy-three. It was attached by a short, narrow pedicle; it was twisted off and the man recovered. These tumors growing in the median lobe, like uterine myoma, move outward in the direction of least resistance, and thus jut out and upward toward the bladder, converting the urethral orifice into a small, crescentic opening and, by a valve-like action, further interfering with the outflow of urine. When expulsive efforts are made, the meatus is raised, in these cases increasing the sac or pocket in the bladder, in which residual urine constantly is found. The walls of the bladder become diseased, when prostatic obstruction continues, from various causes. The venous supply of the penis and bladder forms a plexus about the under side of the gland. These veins are pressed upon and their circulation impeded with a consequent passive congestion and engorgement of the structures involved. The efforts at a complete evacuation of the bladder induce hypertrophy of its walls, and many times the hyperplasia of the prostatic muscle extends to the muscles of the bladder. The bladder often becomes sacculated because of the force exerted by the longitudinal fibres forcing the mucous coat between them. The phenomena caused by an enlarged prostate are not often

referable to the organ itself, but to the bladder whose ability to empty itself has been interfered with. No symptoms are found in many cases in the early stages of enlargement, and are usually noticed as increased frequency of urination, with loss of expulsive power. The man has to get up in the night, one to four or more times, to empty his bladder. This is peculiar to prostatic enlargement as an obstructive agent in contradistinction to stricture, which is most quiet at night. The expulsion is not as usual increased by voluntary effort. The stream starts slowly and is deficient in force; there is often sympathetic disturbance in the rectum—a feeling of fullness, as if the rectum was filled with fæces, yet unrelieved by efforts at evacuation. The man often imagines he has piles. These symptoms are often most marked when the urinary obstruction is slightest, as the prostate pushes more into the rectum than into the bladder, the fæces are flattened and the man thinks he has rectal stricture. The ease with which the man passes water varies; at times there is but little trouble; again, the expulsive power seems feeble, and he empties his bladder slowly and with difficulty. Whenever this array of symptoms is found in a man sixty or upwards, it is a safe inference that he has prostatic enlargement. The diagnosis may be corroborated by examination through the rectum, but it should be remembered that a negative result here does not prove that the symptoms are not the result of prostatic enlargement. The symptoms often simulate those caused by stone, by stricture and neuralgia of the vesical neck. Age is a factor of importance in discriminating from stricture. The expulsive power, too, may be voluntarily increased in stricture. In stricture the stream is narrowed; in prostatic obstruction it is usually full. The symptoms caused by stone are worst during the day and more quiet at night, which is the reverse of prostatic obstruction. The sudden interruptions of the flow, attended with pain and passage of blood, are peculiar to stone. Pain in end of penis occurs in both conditions; stone, too, often exists

in connection with prostatic obstruction, which tends to cause it. Neuralgia of vesical neck is a disease of earlier life, and not often found in the period subject to prostatic enlargement. If unrelieved, the symptoms depending upon obstruction gradually grow worse, the efforts to empty the bladder are more and more unsuccessful, and the amount of urine remaining in the bas-fond gradually increases. This partial retention comes on very gradually and is apt to be overlooked; the calls to urinate become more frequent and more urgent, and the man imagines himself suffering from irritable bladder that will hold but little, when the truth is it is holding too much and he is merely from time to time passing off the excess. Sometimes this condition comes on so slowly and the bladder is so tolerant that its walls become slowly atonied, so that it allows full distension and finally overflows without great pain or discomfort. The man complains that he cannot hold his water, that his bladder is so irritable that the urine constantly dribbles away as fast as it comes into it. A fact that seems to support this view and makes it difficult to convince the patient that he is not making water enough, or that he is carrying a large amount constantly in his bladder, is that the quantity of urine passed in twenty-four hours is as much or more than normal. There is an actual polyuria. The pressure has extended up the ureters, which are often dilated into the pelvis of the kidney. The disease is then well advanced (urine will show low specific gravity, 1.003 to 1.006); has passed into the third stage of its course with beginning disease of the kidney. Frequently there is less catarrh of the bladder and less irritability of the vesical neck than in other forms; the bladder merely passively dilates until, stretched to its fullest capacity, it overflows. It is important to distinguish this overflow from real incontinence, which, though rare in connection with prostatic obstruction, does occur. Sometimes after a period of more or less pronounced signs of prostatic enlargement, complete retention comes on suddenly, caused usually by some impru-

dence—exposure to cold, rough riding, excess in drinking or sexual excitement. Acute congestion supervenes, with sufficient swelling to close the urethra. In other instances the bladder is not tolerant; the congestion around the neck is decided and extends to the vesical walls; the residual urine decomposes and sets up cystitis; the muscular tissue is constantly stimulated and becomes greatly thickened and hypertrophied; the urine is alkaline and irritating, and adds to the pain and irritation as it passes into the prostatic urethra. The general health suffers more in this class of cases; they have indigestion, nausea, and are prone to a low, feverish condition. Altogether, this class of patients suffer much more from the condition of the prostate than the first named. We will next briefly consider the management of prostatic enlargement. When in a man of fifty-five or upward, increasing frequency and lessening expulsive power begin to attract attention, prostatic obstruction may be suspected and an investigation instigated. This may be done as already noticed and by examination per urethra. This will serve two purposes: first, the condition of the prostate may be ascertained approximately, at least; let the man empty the bladder as completely as possible before using the catheter. If three or four ounces of urine are drawn off after its introduction, the bladder is not emptying itself. This is an important fact, although the urine withdrawn may be clear. If ropy, cloudy or offensive, it is yet more important.

If it is noticed that a catheter with a short curve does not reach the bladder, or that the instrument must be much depressed between the legs before it will enter the bladder, the presence of enlargement in the prostate, causing elongation of the canal and an elevation of the vesical entrance, is rendered certain. If the swelling and tenderness is not great, a steel sound or Thompson's searcher may be used to ascertain the presence of stone and to map out the condition of the prostate with greater accuracy. This, if done, should precede the evacuation of

the urine. The use of the catheter is also a means of determining the presence or absence of stone. After the bladder is emptied in prostatic obstruction, a feeling of ease and relief follows. If stone is causing the trouble, the reverse is true. In this class of cases, the important thing is to keep the bladder regularly emptied, and to prevent the accumulation of residual urine. The catheter should be used daily or once in two days, or sufficiently often to accomplish this result. The medicinal treatment of enlarged prostate is not very satisfactory; the use of ergot has been followed by good results. Its power to stimulate non-striated muscular fibre renders it as applicable here as in uterine myoma. It has also a beneficial action on the blood vessels and walls of the bladder, lessening congestion and improving the weakened muscles of the bladder in atonied conditions. Langenbeck has used it for this purpose with success. Hydrochlor. ammonia and potass. iod. have been recommended for this purpose, but experience with medicinal agents, in the control of uterine fibroid, does not encourage faith in their use in prostatic hypertrophy. The hygiene of the bladder is important. While too frequent calls to urinate should be resisted, long neglect will weaken the bladder and increase the prostatic irritation. Exposure to cold, chilling the surface, horseback riding, or riding over rough roads should be avoided. Malt liquors are specially to be avoided, as are all excesses in eating or drinking. While violent exercise is to be avoided, sedentary habits and inaction are equally to be avoided. The difficult, slow urination on first rising in the morning is a result of the prolonged decubitus. While constipation is to be avoided, no harsh active cathartics are admissible. Anything tending to excite pelvic or hemorrhoidal congestion is injurious. Many cases of retention occur from sympathy with hemorrhoids, when but little prostatic enlargement exists. Hot rectal douches given with the double current tube are often valuable in stimulating the bowels to move and to soothe the congested prostate, when pressing on

the rectum. The urine may be kept non-irritating by acetate or citrate potass., or other alkalies, as may be indicated. Corn silk is specially useful in relieving vesical and urethral irritation. Sometimes suppositories containing ergotin, belladonna or opium, are of service in controlling vesical irritation. Many times the first knowledge of your patient is, you call to relieve him from a sudden retention; he is impatient, nervous and irritable; wants and needs immediate relief, and it is important that he have it.

Such an attack of retention may hopelessly impair the contractile power of the bladder and may by reflex action arrest the secretion of the kidney. Before attempting to empty the bladder, see that the man is kept warm. Do not needlessly expose the surface so as to chill him. Place him in a recumbent position with the limbs flexed on the body and the shoulders raised. Use, if possible, a Nelaton or Jaques catheter of not less than No. 8 calibre, and see that it is warm, oiled and perfectly clean. If difficulty is found in passing it, it may be coated with collodion in the outer two-thirds, or, what is better, a small bougie, No. 1 or 2, carried down toward the point, leaving the last two or three inches free. Even this may fail. The channel through the prostate and its relations to the vesical neck may be so changed that it will not pass. Next try a gum elastic, with olivary point, or passed on a stylet with long curve; then, as the point of the catheter strikes the elevated median lobe, withdraw the stylet an inch or more, depressing the outer end sharply, and it will ride over into the bladder. Do not undertake to reach the bladder in these cases with a short curve, and do not use force; the canal is seldom obliterated, and if you get the right direction, no force is needed. It is a good plan to keep catheters on an overcurved stylet; then when they are used without it, they tend to tilt upward at the point and thus override the obstruction. In some extreme distortions the eloonal catheter of Mercier may be useful, but it will be seldom that anything else than

those already mentioned will be needed; do not, under any circumstances, use a hard catheter in such cases. After the instrument has passed into the bladder, the flow of urine may suddenly stop, before the bladder is emptied, from the plugging of the catheter. A little warm water, or better, warm solution of borax or soda thrown into the catheter, will clear it. Sometimes the urethra and prostate are exquisitely sensitive. This may be obviated by injecting a solution of cocaine a few minutes before using the catheter, and then injecting a teaspoonful of olive oil just before using the instrument. The finger in the rectum may be used sometimes to tilt up the point of the catheter, so as to glide it over the obstruction. If much difficulty has been experienced in the introduction of the catheter, it may be left in the urethra twenty-four or even forty-eight hours, especially if it is a rubber one. An olivary point would not be safe to leave, as the neck, which is slender, might be softened and easily broken off. Another class of cases are met with. A man consults you for incontinence; he tells you he cannot retain his water; for some time past he has been compelled to urinate, often passing an ounce or two at a time, and latterly it dribbles from him continually. These cases come on very gradually, and the bladder will often be found holding three or four pints. The danger here consists in its sudden evacuation; to suddenly empty such a bladder is to invite the speedy destruction of the patient. Many such a case, in fair condition when they applied for relief, has, after complete evacuation of the bladder, sunk into a low, febrile condition, with symptoms of cystitis and finally suppression and death. If the bladder has been long overstretched, remove only a pint or two at once and take the tension off gradually. After being once emptied, it must be kept so by the use of the catheter—passed once in six hours, as a rule. If the urine is offensive or ropy, or there is any evidence of catarrh in the mucous membrane, the bladder must be cleansed by irrigation. Warm water, with borax, glycerine, hyposulph. soda, sali-

cylate soda, boric acid may be used. If a tendency to hemorrhage exists, hammælis, ergot, or plumbi acetat will be beneficial. If phosphatic deposits form, nit. ac. will help to prevent them; also acet. potass. If the case is an old one, nit. sil. or infus grindelia robust is useful. The irrigation may be practiced without removing the catheter, by attaching a rubber tube to the end and allowing a quantity proportionate to the previous dilatation to run into the bladder. This may then be allowed to run out and the process repeated until the water returns clear. This process is valuable to relieve congestion and irritation about the prostate and vesical neck, whether catarrh is present or not. In these cases the man must be taught the use of the catheter, as it will be his only means of relief. The bladder, after so long distension, rarely regains its power of voluntary evacuation. It is said that in acute congestions of the prostate, following excesses in eating or drinking, that Queen of the Meadow has been very efficacious. I have no personal experience with it. Couch-grass I have found very useful. Hard catheters should be avoided, except when false passages exist. The use of large calibres avoids this difficulty, sometimes. If the catheter is used too frequently, congestion, irritation, polyuria and kidney disease are induced. The frequency must depend upon the case, only being used often enough to prevent decomposition in residual urine. Three drops amyl. nit. to pint water arrest the tendency to change in urine in marked degree—sometimes one-tenth per cent. potass. permang, one-sixth per cent. carbolic acid, or one-half per cent. resorcin. A caution is needed in the use of cocaine; under its action a greater danger of creating a false passage exists than when the sensibility is intact, but under no circumstances should force be used. The water used for injecting should be strained. Cases have occurred in which small portions of foreign matter have passed into the bladder and formed a nucleus for stone. Operative procedure should be reserved for a *dernier ressort*. Newman

of New York and others before him have used the galvanic current to destroy the enlarged median lobe. Dr. Harrison does an external urethrotomy and forcibly dilates the prostatic urethra. His results have been very good, and the method seems preferable to any of the operative procedures in vogue.

CORRESPONDENCE.

CINCINNATI LETTER.

A school of nurses is to be established this year in connection with the Cincinnati Hospital.

Dr. C. D. Palmer, whose sad accident just previous to the meeting of the American Medical Association, in this city, last spring, so many will remember, has returned home after the summer at Atlantic City, with regained health. His many friends are rejoiced to see him in his old haunts again.

Dr. J. T. Whittaker, after summering at Chautauqua, is back again at his work, as is also Dr. P. S. Conner, who has been resting and lecturing in New England. Dr. W. W. Dawson, the president of the American Medical Association, only just returned from a summer fishing tour, has hied himself off again, this time to California.

Some of our Cincinnati physicians, by going to certain summer resorts successive summers, have built up a summer practice, which has become quite profitable.

The Ohio Medical college has opened for the winter, with a very promising attendance.

The Academy of Medicine is again in full operation.

The American Rhinological Association held its sixth annual meeting, at the Gibson House, this city, September 12, 13, 14, with Dr. C. H. Von Klein as president, and of Dayton, Ohio; R. S. Knode of Fort Wayne, Indiana, first vice-president; A. G. Hobbs of Atlanta, Georgia, second vice-president; John North of Keokuk, Iowa, secretary and treasurer; N. R. Gordon of Springfield, Illinois, librarian;

A. B. Thrasher, Cincinnati, chairman committee of arrangements.

As officers for the ensuing year the following were elected: President, Dr. John North, Keokuk, Iowa; first vice-president, A. G. Hobbs of Atlanta, Georgia; second vice-president, Dr. A. B. Thrasher, Cincinnati; secretary and treasurer, Dr. R. S. Knode of Fort Wayne; librarian, Dr. A. R. Gordon, Springfield, Illinois; member of the board of councilors, Dr. J. G. Sinclair, Nashville, Tennessee.

The address of the president, Dr. C. H. Von Klein of Dayton, was a scholarly production, and discussed in particular the subject of specialism, with remarks on what the specialist should be and his relation to his brother practitioner and his patients. The spirit of the paper was heartily concurred in by the fellows of the association. One afternoon session was devoted to the discussion of hay fever, pathology and treatment, and the curative powers of mechanical treatment. The debate drew largely on the personal experience of the gentlemen present.

"The Surgical Treatment of Nasal Catarrh" was a very good paper by Dr. A. B. Thrasher of Cincinnati, and drew forth an interesting discussion.

The veteran of the association was Dr. Thomas F. Rumbold of St. Louis, who read several papers of great interest and profit.

"Local and Constitutional Treatment of Acute Catarrh of the Air Passages" was well handled by Dr. J. W. Carpenter of Stanford, Kentucky.

"Chorea of the Soft Palate, Caused by Hypertrophy and Hyperæsthesia of the Mucous Membrane Covering the Posterior Part of Both Inferior Turbinated Bodies" was the subject of a paper by Dr. J. E. Scadel of St. Paul, Minnesota.

Several new names were submitted for election to the fellowship of the association and passed upon favorably.

The annual dues were changed from three dollars to five dollars. The treasurer's report showed the condition of the association to be a flourishing one.

On the invitation of Dr. A. B. Thrasher of Cincinnati, the association was treated to a drive to the Zoölogical gardens and suburbs, which proved very delightful.

Chicago was chosen as the place of the next meeting.

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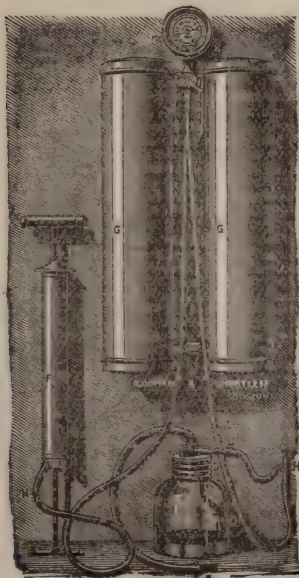
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—ON—

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This forms a fine dry powder, which will keep in any climate, and only requires the addition of water to render it a suitable nutrient for infants, or adults whose digestive powers have become impaired.

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We do not claim this food to be "a PERFECT substitute for human milk."
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PARED FOOD THAT HAS EVER BEEN PRODUCED,

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The Cleveland Medical Gazette.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY

ONE DOLLAR PER ANNUM IN ADVANCE.

Vol. III. begins with November, 1887. Subscriptions can begin at any time.

REMITTANCE OF MONEY.—All money should be sent by P. O. Order, Postal Note or Registered letter, addressed to the CLEVELAND MEDICAL GAZETTE, 143 Euclid Avenue, Cleveland, Ohio. In no case should money be sent by check, except on New York or this city.

Original Communications, reports of cases and local news of general medical interest are solicited. All communications should be accompanied by the name of the writer, not necessarily for publication.

All letters and communications should be addressed to the CLEVELAND MEDICAL GAZETTE, No. 143 Euclid Avenue, CLEVELAND, OHIO.

Changes for advertisements must reach us not later than the second week of the month to be corrected in current number, addressed to W. N. GATES, Manager Advertising Department, 10 Public Square.

EDITED BY A. R. BAKER AND S. W. KELLEY.

EDITORIAL.

With this issue we close the third volume of the GAZETTE. We know now, that it was from experience that one of our exchanges spoke, when he greeted our first appearance with the following not very encouraging introduction, "*Medical journalism has not heretofore prospered in Cleveland*, but the city is larger now, and we wish our new contemporary ample prosperity and long life." When we recollect that not less than six or eight medical journals have, at various times, broken ground in this unfruitful field, and have, after an existence of from one issue to one or at most two years, given up the struggle, we see reason to feel encouraged at our measure of success.

Owing to some unaccountable reason, the physicians of Cleveland have not been contributors to the literature of medicine, either by the publication of books, or by writing for the medical journals. If you pick up almost any medical dictionary, annual, compendium, review, or any book, in

which the labors of a large number of medical men appear as authors, editors, collaborators or correspondents, Cleveland is entirely unrepresented, and so far as medical progress is concerned, our beautiful city of two hundred and fifty thousand inhabitants is a complete blank, while almost every little hamlet in the country has at least one or more men who have added something to the sum of medical knowledge. While this is a fact and we are compelled to state it, we do it in no spirit of censure and in no fault-finding mood. What we now say publicly, we have said many times to the physicians of this city privately, in our endeavors to induce them to make contributions to our medical societies and journals. The condition of "solitary confinement at hard labor," to which the profession of Cleveland has allowed itself to become accustomed, is recognized and often commented upon by the profession of the country. At the last meeting of the State society a prominent physician of Cincinnati remarked, "You may have some very good men at Cleveland, but we certainly never hear from them."

We have some very good men here. They have shown sufficient aptitude at acquiring science and profiting by it, have accepted without thanks the wealth of professional knowledge accumulated by the labor of others, but have never been sufficiently moved by gratitude to contribute a mite to the general fund. Like a sponge, absorbing freely; but there has not yet been found a motive sufficiently powerful to squeeze out a modicum for the common use.

One year ago we offered a prize of fifty dollars for the best short article on any medical subject whatever, in the hope that a fee would compensate some of our physicians for the time necessary to reduce to writing some opinion or observation, but not a solitary article appeared in competition, and we soon became satisfied that something more potent than filthy lucre was necessary to secure contributions from the average Cleveland doctor. These explanations will account for the fact that we have been obliged to depend very largely for our original matter upon physicians outside the city; and we fear that if we had been obliged to depend entirely upon

local talent, we would long ere this have gone the way of our predecessors.

We wish to repeat that we make these remarks with the most kindly feelings towards our professional brethren. Personally, we have received the most kindly treatment from the profession in the city, and our large subscription list will attest that our efforts have been appreciated. Even the many who have not favored us with contributions have given us encouraging words; and probably without these manifestations of approval on every hand, we would long ago have suspended publication.

Our next number, the first of volume four, is to contain a steel portrait, together with a short biographical sketch, of that eccentric surgeon, Dr. Horace A. Ackley. Any of our readers wishing extra numbers will please notify us in advance. We have a few remaining copies containing the portrait of Dr. Delamater.

CLEVELAND WATER SUPPLY.

The question of how best to utilize the same body of water as a receptacle for all the sewerage of the city and at the same time supply good, healthful water for drinking, culinary and other purposes, is a question which is presented to all lake cities. The subject is now receiving one of its periodical agitations in this city. It has been thoroughly discussed by the daily press and undoubtedly needless alarm created in the minds of many of our citizens as to the purity of our water supply. At the last meeting of the Cuyahoga County Medical society, Dr. Ashmun presented very forcibly the dangers to our water supply from the present method of sewerage into the river. A committee, of which Dr. Cushing was made chairman, was appointed to investigate the subject and report to the society.

Professor Smith of the Case School of Applied Sciences has made a number of chemical analyses which point to the following conclusions:

" First—That our water supply is at all times slightly contaminated by shore influences.

" Second—That at times of especially high current in the river this contamination is serious and may be regarded as a possible source of danger, since the supply comes in direct contact with the river water.

" Third—That there is a considerable difference in purity of water along the city front and at different distances off shore. The contamination decreases as the distance from shore increases in all cases except off Gordon's Park, to the east of the city, where the garbage boats dump their loads. The water to the west of the river is usually better than that to the east, the samples farthest west and two miles from shore being nearly as good as those taken fifteen miles from shore.

" Fourth—That in times of ordinary weather the river water spreads out and passes to the eastward, but in times of high northeast winds some of it drifts westward. After such a storm floating garbage, deposited far to the eastward, has been noticed near the crib.

" Fifth—That the matter occasionally held in suspension in the water during stormy weather is not entirely clay and sand, but contains some decomposing matter of animal and vegetable origin, and should be removed from the water before the water is used for drinking purposes."

These investigations only serve to corroborate the generally received opinion that there is a current in the lake eastward and that the water is comparatively pure toward the west, where our present " crib " is located. In view of these facts, it seems that the only problem which presents itself is that of disposing of the sewerage as far to the east as possible, and this will necessitate sooner or later the building of an intersecting sewer parallel with the river and along the lake front, at least beyond the proposed eastern end of the new breakwater.

While this is a contingency for which we must be prepared in the near future, and one which will necessitate a large expense, we do not deem it necessary to alarm our citizens

about the present water supply. The fact of the matter is, our water is infinitely purer and better than that of almost any other city in the country, not located on the great lakes, and it is only necessary to guard against any possible contamination from sewerage to insure an abundant supply of pure water not surpassed in the world.

NEW BOOKS.

'FOSTER'S NEW MEDICAL DICTIONARY': Being a Dictionary of the Technical Terms used by Writers on Medicine and the Collateral Sciences, in the Latin, English, French and German languages. Edited by Frank P. Foster, M. D., Editor of the New York Medical Journal. Published by D. Appleton & Company, New York. 1888.

This encyclopædic work, to be completed in four volumes, will fill a long-felt want in medical literature. Dunglison's 'Medical Dictionary' is old; Thomas's is good so far as it goes, but the need of a dictionary full and comprehensive has been felt by every medical student.

The necessity of a medical dictionary containing French, German and English, as well as Latin, is illustrated by the numerous small works issued of this kind. It has been remarked during the past year that there were no new medical works being issued of any permanent value, but this statement must be modified since the appearance of this work, which will prove of inestimable importance and usefulness for many years to come. The value of this work depends upon its comprehensiveness, and the physician who refers to it will not be chagrined by the absence of the important word he may seek, and he who is interested in the etymology of medical terms will find it an unlimited mine of wealth to draw from.

Many members of the profession have been waiting patiently for a number of years for the appearance of this dictionary, and we are confident they will not be disappointed.

'THE DISORDERS OF MENSTRUATION,' by Professor Edward W. Jenks, M. D., LL. D., etc. George S. Davis, Detroit.

A want supplied. This little volume, No. 11 of the Physicians' Leisure Library, is just such a treatise as might have been expected from the pen of Professor Jenks. Simple in style, methodical in arrangement, concise and comprehensive, it commends itself at once as a valuable contribution to modern medical literature. The author has succeeded admirably in doing what, on his first page, he purposes to do, viz.: "to set before his readers only that which will serve to be pre-eminently practical to the busy practitioner," unless it be added that it may be quite as profitably perused by the student who, too often, finds the subjects here treated too little dwelt upon during his attendance on lectures. We heartily commend this little volume to the attention and perusal of any of the profession who desire to make themselves familiar with the common but important subjects of which it treats.

C. F. DUTTON.

'PHOTOGRAPHIC ILLUSTRATIONS OF SKIN DISEASES; A COMPLETE WORK ON DERMATOLOGY; AN ATLAS AND TEXT-BOOK COMBINED.' By George Henry Fox, A. M., M. D. Published by E. B. Treat, 771 Broadway, New York. In twelve monthly parts, each part consisting of four plates. Price per part, two dollars. Parts one, two, three, four, five and six now ready.

It is now eight years since the first appearance of 'Photographic Illustrations of Skin Diseases' by Dr. George Henry Fox. The extensive sale of this work, and its acknowledged appreciation and prestige by the profession, have proven conclusively the value of photography in accurately portraying the various phases of cutaneous diseases; and the continued demand for these plates is ample evidence of their merits and their adaptation to the wants of the general practitioner. In this second series the total number of plates is increased fifty per cent., including several important affections which were altogether omitted in the former work. In place of the few pages of descriptive matter which accompany the

original plates, a notable enlargement of the text, fully one hundred per cent., is a leading feature of the present work.

The diagnosis and treatment of skin diseases are especially considered. In its present form the work appears as a combined atlas and text-book.

As heretofore, the plates are made from photographic negatives taken from life. The artotype reproductions of these negatives, by a process which renders them notably unlike photographs, will not fade by age or exposure, and are made by Edward Bierstadt; the hand coloring of the plates, an important feature of the work, has been entrusted to the well-known medical artist, Dr. Joseph Guertney, formerly a student under Hebra in the general hospital at Vienna.

NOTES AND COMMENTS.

The Rome that was built on the seven hills beside the Tiber, was but the central sun of that great empire whose limits were co-extensive with human progress. So the medicine which rested on the foundations of the seven chairs of the schools of fifty years ago, was only the nucleus of that broad realm of science which to-day makes tributary every branch of human knowledge.

ALBERT L. GIHON.

"As to the school in which both sexes are educated together, a word may be said. Surely no system can be worse than that which complicates a difficult problem by taking two sets of beings, of different gifts and of unlike physiological needs and construction, and forcing them into the same educational mould."

S. WEIR MITCHELL.

Oliver Wendell Holmes. Characterization—by J. G. Whittier.
—If any reader (and at times we fear it is the case with all) needs amusement, and the wholesome alternative of a hearty laugh, we commend him not to Dr. Holmes the physician, but to Dr. Holmes the scholar, the wit and the humorist;

[Form 3]

not to the scientific medical professor's barbarous Latin, but to his poetical prescriptions, given in choice old Saxon. We have tried them, and are ready to give the doctor certificates of their efficacy.

Looking at the matter from the point of theory only, we should say that a physician could not be otherwise than melancholy.

A merry doctor! Why, one might as well talk of a laughing death's-head—the cachinnation of a monk's *memento mori*.

This life of ours is sorrowful enough at its best estate. The brightest phase of it is “sicklied o'er with the pale cast” of the future or the past. But it is the special vocation of the doctor to look only upon the shadow; to turn away from the house of feasting, and go down to that of mourning; to breathe day after day the atmosphere of wretchedness; to grow familiar with suffering; to look upon humanity disrobed of its pride and glory, robbed of all its fictitious ornaments—weak, helpless, naked—and undergoing the last fearful metempsychosis from its erect and God-like image, the living temple of an enshrined divinity, to the loathsome clod and the inanimate dust.

His ideas of beauty, the imagination of his brain and the affection of his heart are regulated and modified by the irrepressible association of his luckless profession.

Woman as well as man is to him of the earth, earthy. He sees incipient disease where the uninitiated see only delicacy.

A smile reminds him of his dental operation; a blushing cheek, of his hectic patients; pensive melancholy is dyspepsia; sentimentalism, nervousness.

Tell him of love-lorn hearts, of the “worm i' the bud,” of the mental impalement upon Cupid's arrow, like that of a Giaour upon the spear of a Janizary, and he can only think of lack of exercise, of tight lacing and slippers in winter. So much for speculation and theory. In practice it is not so bad after all.

The grave-digger in *Hamlet* has his jokes and grim jests; we have known many a jovial sexton; and we have heard

clergymen laugh heartily, at small provocation, close on the heel of a cool calculation that the great majority of their fellow-creatures were certain of going straight to perdition. Why, then, should not even the doctor have his fun?

Nay, is it not his duty to be merry, by main force, if necessary? Solomon, who, from his great knowledge of herbs, must have been no mean practitioner for his day, tells us that "a merry heart doeth good like a medicine," and universal experience has confirmed the truth of his maxim.

Hence it is, doubtless, that we have so many anecdotes of facetious doctors, distributing their pills and jokes together, shaking at the same time the contents of their phials and the sides of their patients.

It is merely professional, a trick of the practice, unquestionably, in most cases; but sometimes it is a "natural gift," like that of the "bone-setters" and "scrofula strokers" and "cancer curers," who carry on a sort of guerilla war with human maladies.

Such we know to be the case with Dr. Holmes. He was born for the "Laughter Cure" as certainly as Preisnitz was for the "Water Cure," and has been quite as successful in his way, while his prescriptions are infinitely more agreeable.

The Medical Department of Western Reserve University opened its winter session, with appropriate exercises, on the nineteenth of September. A degree of falling off in the number of students had been expected, on account of the obligatory three years' course. But upon opening the session it was found that these apprehensions were needless, while a perceptible improvement in the preliminary qualifications of the class seems to be a great source of gratification to the faculty.

"*I believe in Christian science* of the medical type with but two exceptions, which I will take the liberty of stating: The first is, I don't believe it is science, and in the second place, I don't believe it is Christian."

Rev. JAMES McLEOD, Indianapolis.

"As the apostle said: 'Finally, brethren, pray for us that we may be delivered from all unreasonable men.' Ministers and doctors need to be prayed for to be delivered from that class of men. The faith cure is one illustration: A deluded sort of people who mean well, many of them, who base a great doctrine on one text, like a pyramid on its point, who say that when St. James says we are to pray for the sick and anoint with oil, he means we shall only pray for the sick. That is absurd, for St. James evidently refers to oil, as it was used in those days as the principal medicine, and when he says we are to use oil, he means that with prayer we are also to use medicine. So when a man asks me, Do you believe in the faith cure? I say, Yes, I believe in what has been called the faith and oil cure. Pills and prayer; that is good doctrine, Dr. McLeod. I believe in prayer and medicine, for medicine without prayer is atheism, and prayer without medicine is superstition." Rev. M. L. HAINES.

What is the use of young men spending hundreds of dollars and years of time in acquiring a medical diploma, when it can be done for \$17, and the odd spells out of business hours? We extract the following advertisement from a pharmaceutical journal:

To Facilitate Graduation in Medicine by Pharmacists.

COMPLETE COMPENDIUM
FOR THE DEGREE OF M. D.

IN TWO PARTS. \$1.00 EACH.

Part one contains Anatomy (two parts), Physiology, Practical Medicine, Diseases of the Eye. Part two, all other subjects. Each part equals five compends. By _____, M. D., editor Journal of _____, and Director Preparatory Medical College.

This unique condensation is indispensable to the student. It saves nearly 60 per cent. of labor in graduating.

When going up the student can go over this Compendium several times a week.

It keeps in the track of the examination questions, and has not a superfluous word.

It contains a complete collection of acrostics and aids to memory, that enormously facilitates the getting up one's Anatomy.

Sent free for \$1.00, by the

PHARMACEUTICAL _____

PREPARATORY MEDICAL COLLEGE.
SPECIAL DRUGGIST'S COURSE OF ONE MONTH.

Designed to enable a student to pursue his studies alone, after it to complete the course and graduate in Medicine while following his business.

FEE, \$15.00.

Particulars on Application.

READING NOTICES.

The New York office of Mariani & Co. has been removed from 127 Fifth avenue to 52 West Fifteenth street, New York, where they will be most happy to receive the members of the medical profession, and from where all correspondence will receive prompt attention.

Sulfonal-bayer is the latest hypnotic brought to the attention of the profession. See advertisement of Schieffelin & Co.

Physicians visiting the city should not fail to call on E. M. Hessler, 58 Public Square, dealer in surgical instruments, etc. We think that we can safely say, without fear of contradiction, that Hessler carries the largest stock of surgical instruments of any firm in the west.

Will the doctor who sent us postal order for two dollars, about October 5, post-marked Canton, O., please send us his name, so that we can properly credit him on our books?

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DOCTOR—DO YOU WANT TO BUY OR SELL
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locations for sale. Partners, assistants and substitutes furnished. Send full particulars with stamp.

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A RATIONAL IDEA.

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QUININE PILLS.

We especially wish to recommend our Quinine Pills as being in the ideal condition for administration. Try them. They will give you better results than Quinine in capsules, and will not cost more.

QUININE PILLS IN BULK.

For several years the various manufacturers have been selling Quinine and Cinchonidia Pills in bulk to a select few of the retail trade, at a greatly reduced price. In order that every consumer may have the benefit of this reduction, we bottle these salts in bottles containing five ounces each, at a price which closely approximates the combined cost of the salt and capsules in which to put it, thus insuring greater accuracy and saving much time.

5 Ounces Quinine in $\frac{1}{4}$ Grain Pills (4375 Pills)	\$4.50
5 " " 1 " " 2185 "	4.50
5 " " 2 " " 1695 "	4.50
5 " " 3 " " 728 "	4.50
5 " " 5 " " 437 "	4.50
5 Ounces Chinchondia Sulph., any size Pill,	1.50

Prices subject to fluctuation in price of salt.

HYPODERMIC GRANULES AND MORPHINE PILLS.

A New Feature.—Our Hypodermic Granules are made without compression or coating, aside from a thin film of Boracic Acid to cover the taste, and are composed simply of the drug indicated, triturated with chemically pure Boracic Acid, which renders them *Antiseptic, Non-irritating* and *Local Anaesthetic*.

The accuracy of dose is absolute, and the fact that they are sufficiently soluble for hypodermic use insures their free and rapid solution when given by the stomach.

Special Offer to Physicians!

To facilitate the introduction of our goods, we offer AN ELEGANT POCKET CASE, containing twelve (12) bottles filled with Granules (125 to 150 in each bottle), for \$2.25, but little more than the value of the case and twenty-five per cent. less than list price of the granules. Physician's name on each case in gilt. Write for granule list to check from. Case sent by mail, postage prepaid. Cash must accompany order.

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